



DAIRYGOLD/TEAGASC DAIRY DEVELOPMENT PROGRAMME 2014 – 2017

**Farm Walk
On the Farm of
Oliver Looney,
Island, Burnfort, Mallow, Co. Cork
Wednesday 12th April, 2017
(By kind permission)**

Focus of the Programme:

Delivering Profitable & Sustainable Dairying

Today's Agenda

1. Outline of Farm Details.
2. Developments in EBI & Genomics
3. Breeding Goals for this farm.
4. 2017 Breeding Season Plan for this farm.
5. Stock Bull Management.

Website :<http://www.agritrading.ie/Dairygold--Teagasc-Joint-Programme>

Speakers and Contacts

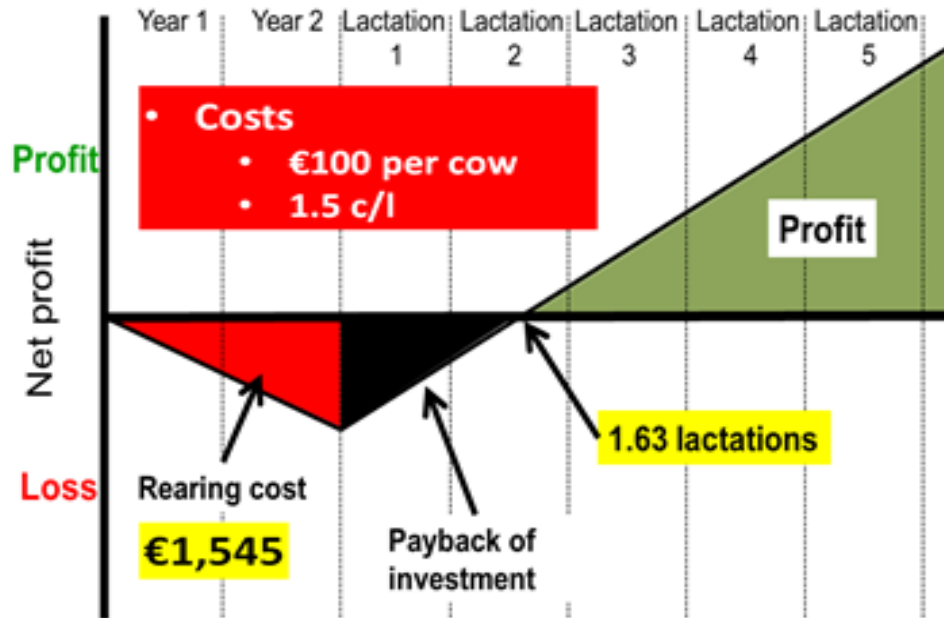
Sean Cooney	Teagasc, Mallow	087 9159927
Billy Cronin	Dairygold Head of Transport & Milk Management	025 24411
Doreen Corridan & Terry Dillon	Munster AI	
Adrian O'Callaghan	Teagasc Joint Programme Advisor	087 9833679

Farm Event Safety Notice

Please take care entering and exiting the parking area and while crossing the road.
Please take care during the Farm Walk, as you will be walking on farm roadways and concrete surfaces, which may be slippery.
Be aware of livestock on the farm and avoid any unsafe movement in their vicinity.
Please take care with wire fences, gates and doors.

PLEASE DISINFECT FOOTWEAR

Return on investment



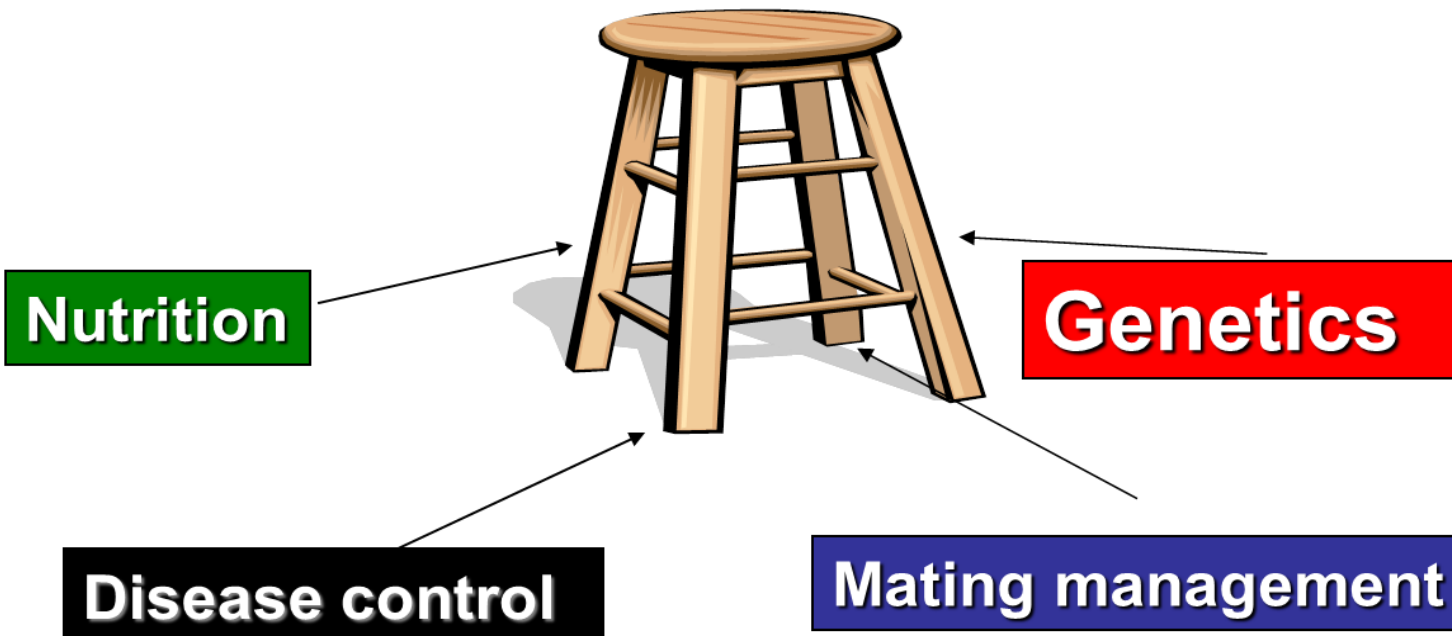
The power of genetics

Next Generation Herd 2013-2016

	ELITE	AVERAGE
Milk Receipts	€1891	€1862
Pregnant to 1st service	60%	46%
6-wk pregnancy rate	73%	58%
Final in-calf rate	92%	81%

High vs. Low Fertility EBI SI

Early post-calving	At breeding
Greater feed intake	Stronger heats
Better BCS	Fewer silent heats
Earlier cyclicity	Less ovulation failure
Better uterine health	Greater progesterone



**The
Fertility
Stool**

Farm Details

Land		Stock Details	
Land owned (ha)	26	Dairy cows	86
Land leased (ha)	14	0-1 replacements	19
Overall SR LU/HA	2.5	1-2 replacements	16
Milking platform (ha)	34		
SR on milking platform (ha)	2.5		

Herd Performance

Milk Production	12/04/17	2016
Milk yield (litres/cow)	30.5	6407
Milk protein %	3.41	3.64
Milk fat %	4.22	4.21
Milk solids (kg/cow)	2.40	518
SCC(,000 cells/ml)	111	134
Meal (kg/cow)	4	800

Financial Performance

	Oliver Looney c/litre 2016	Average Profit Monitors c/litre 2016	Top 10% Profit Monitors c/litre 2016
Dairy Output	28.57	29.19	30.69
Feed	3.54	3.90	3.47
Fertiliser/Lime	2.33	2.42	2.18
Vet	0.87	1.12	0.98
AI	0.66	0.54	0.49
Contractor	1.50	1.72	1.37
Other Variable Costs	2.01	1.77	1.47
Total Variable Costs	10.91	11.46	9.97
Machinery	0.87	1.25	0.88
Car, ESB, Phone	0.83	1.23	0.92
Depreciation	2.55	1.79	1.69
Hired Labour	0.33	1.16	1.00
Other Fixed Costs	2.66	3.46	2.58
Farmer's Own Labour (€40K/total Litres)	8.32	7.35	6.27
Total Fixed Costs(incl farmers own labour)	15.56	16.24	13.35
Total Costs	26.47	27.7	23.32
Total Milk Solids Produced kg/Ha	1143	1,001	1,282

Calving and Fertility Performance

	Year	Cows	Heifers
Calving Start Date	2017	22-01-17	25-01-17
Median Calving Date	2017	07-02-17	02-02-17
Calving Period	2016	12 wks.	7wks 4d
Calving Interval (Days)	2017	363	
Spring 6 wk. Calving Rate (%)	2017	91%	
3 wk. Submission rate	2016	91%	96%
6 wk. Submission Rate (%)	2016	100%	100%
Breeding Season Length	2016	10 wks 3d	8 wk 6 d
1 st Service Conception Rate	2016	66%	78%
Empty Rate (%)	2016	9%	9%
Breeding Start Date	2017	20-4-17	20-4-17
Breeding Finish Date	2017	01-7-17	15-6-17

Comparison of Fertility & Calving Data Statistics 2016

Description	Oliver Looney 2017	Oliver Looney 2016	Dairygold Average 2016	Dairygold Top 10% 2016	Nationally 2016
Calving Interval (days)	366	373	384	363	389
6 week calving rate	91%	81%	63%	82%	58%
Total Dairy replacements	18%	31%	23%	40%	24%
% Heifers Calved at 22 – 26 months	100%	100%	66%	100%	59%
Herd EBI	€96	€88	€67	€96	€70

Key System Drivers – Resilient Systems

	Average Dairy Farmer	Target	Economic Return €	Potential change in Profit €
Fertility (6 wk calving rate)	57	90	€8.22/1%	€271/cow
Mean calving date	9 th March	15 th -25 th Feb	€3.86/day	€85/cow
Grass Utilised/Ha	7.3ton DM/Ha	12 ton D.M/Ha	€180/ton	€850/Ha

**Economic Breeding Index (EBI)
Herd Summary - Feb 2017**

LoCall 1850 600 900

Herd Owner: OLIVER LOONEY

Herd Number: D3480357

Data Extracted: 03/03/2017

1. EBI Herd Summary

Average EBI for all dairy cows with; (i) a known sire (or milk recorded progeny with a known sire) and (ii) are currently on your farm.

* Number of animals that are missing an EBI result

Animal Group	Num of Cows	Milk Kg Fat % Prot %	Surv% CI Days	Milk % Cont	Fertility % Cont	Calv % Cont	Beef % Cont	Maint % Cont	Mgmt % Cont	Health % Cont	EBI €
Cows with EBI	85	7		€ 30	€ 40	€ 30	€ -8	€ 3	€ 0	€ 1	€ 96
Missing EBI*	0	5.9 0.10	1.2	26.8%	35%	26.7%	-7.4%	2.8%	0.2%	1%	
Total Cows	85	3.8 0.06	-2.1								
1st Lactation	20	-4		€ 37	€ 60	€ 34	€ -8	€ 3	€ 1	€ 2	€ 129
		8.0 0.15 4.3 0.09	2.0 -2.9	25.7%	41.2%	23.6%	-5.7%	1.8%	0.8%	1.2%	
2nd Lactation	18	25		€ 31	€ 34	€ 32	€ -13	€ 8	€ 1	€ 1	
		5.1 0.07 4.2 0.06	0.8 -2.0	26.1%	28.8%	26.4%	-11%	6.3%	0.5%	1%	
3rd Lactation	18	-30		€ 30	€ 36	€ 31	€ -8	€ 5	€ -1	€ 1	€ 95
		8.5 0.18 2.8 0.07	1.1 -1.9	26.8%	32.4%	28%	-6.9%	4.7%	-0.4%	0.7%	
4th Lactation	14	50		€ 24	€ 38	€ 31	€ -4	€ -5	€ 1	€ 1	
		3.8 0.03 3.7 0.04	1.1 -2.1	23.2%	36.8%	30.1%	-3.7%	-4.6%	1%	0.7%	
5th Lactation (+)	15	6		€ 26	€ 24	€ 21	€ -8	€ 4	€ -2	€ 1	€ 67
		2.8 0.05 3.6 0.06	0.8 -1.2	30.4%	28.2%	24.4%	-9.7%	4.3%	-1.7%	1.4%	

2. Dairy Youngstock

2017 Calves	21	21		€ 60	€ 83	€ 41	€ -12	€ 3	€ 1	€ 4	€ 181
Missing EBI*	0	9.4 0.15	2.5	29.4%	40.9%	19.9%	-5.7%	1.5%	0.6%	2%	
Total Calves	21	7.8 0.13	-4.3								
2016 Calves	24	32		€ 46	€ 67	€ 34	€ -11	€ 5	€ 1	€ 2	€ 144
Missing EBI*	0	7.4 0.11	2.1	28.1%	40.4%	20.4%	-6.7%	2.9%	0.5%	1.1%	
Total Calves	24	6.3 0.1	-3.3								

To Calculate Herd Genetics for Protein % & Fat %

PD for Protein % x **3.5 + 3.40%**

PD for Fat % x **3 + 3.90 %**

So for Oliver Looney – Protein % = $0.06 \times 3.5 = 0.21 + 3.40\% = 3.61\%$

Fat % = $0.10 \times 3 = 0.30 + 3.90\% = 4.20\%$

2017 AI Bulls to be used on Oliver Looney's Herd

	EBI(€)	EBI Sub Index							PTA's							CI days	SU %
		Milk (€)	Fert (€)	Calv (€)	Beef (€)	Maint (€)	Mmgt (€)	Hlth (€)	M Kg	F Kg	P Kg	F+P Kg	F %	P %			
All Cows in Herd	96	30	40	30	-8	0	0	1	7	5.9	3.8	9.6	0.10	0.06	-2.1	1.2	
Predicted 2018 Calves	174	57	82	38	-9	1	2	4	75	9.9	8.0	17.9	0.12	0.09	-4.2	2.5	
Bulls Weighted Averages	253	83	124	46	-11	2	3	6	142	13.9	12.2	26.2	0.14	0.12	-6.3	3.8	

Bull	Name of Bull	EBI (€)	No of Straws	EBI Sub Index							PTA's							Pr (€)	Supplier	
				Milk (€)	Fert (€)	Calv (€)	Beef (€)	Mnt (€)	Mgt (€)	Hlth (€)	M Kg	F Kg	P Kg	F+P Kg	F %	P %	CI days			Su %
FR4017	(IG) MILEWATER LEON	218	8	73	112	53	-17	-3	-2	2	89	13.3	10.1	23.4	0.17	0.12	-5.4	3.8	19	NCBC,Munster,PG
HZB	(IG) BALLYDEHOB PAT 1356	242	14	69	117	42	4	-3	10	4	171	13.3	10.7	24.0	0.11	0.08	-5.4	4.2	18	NCBC,Munster,PG
FR2297	(IG) CASTLEBLAGH RONNIE	231	7	77	120	41	-10	-2	2	2	225	14.5	12.3	26.8	0.09	0.08	-5.5	4.4	19	NCBC,Munster,PG
FR2298	(IG) OLCASTLETOWN RONALDO	264	14	97	138	27	-2	-7	4	7	199	15.8	14.8	30.6	0.13	0.13	-6.8	4.5	19	NCBC,Munster,PG
FR2371	(IG) ARDRAGOLD PARKER	248	22	86	114	50	-15	5	3	6	91	14.4	11.9	26.3	0.18	0.15	-6.2	3.0	19	NCBC,Munster,PG
FR4118	(IG) COMMEEN TOPMAN	287	9	84	149	50	-11	8	1	6	121	14.2	12.1	26.4	0.16	0.13	-6.9	5.3	21	NCBC,Munster,PG
FR4020	(IG) KNOCKDOE JACK	283	14	86	140	53	-13	2	4	11	254	14.4	14.1	28.4	0.07	0.09	-7.6	3.9	19	NCBC,Munster,PG
LWR	(IG) LONGVIEW RELIABLE	231	13	80	109	49	-13	-2	2	6	-2	8.3	10.7	19.0	0.14	0.18	-5.6	3.3	19	NCBC,Munster,PG
SEW	SEAROAD AWS PAMELA 1	262	9	89	121	54	-26	18	0	7	174	18.3	13.0	31.3	0.19	0.12	-6.7	3.1	18	Dovea AI

Bull Selection Guidelines

Key Objective:

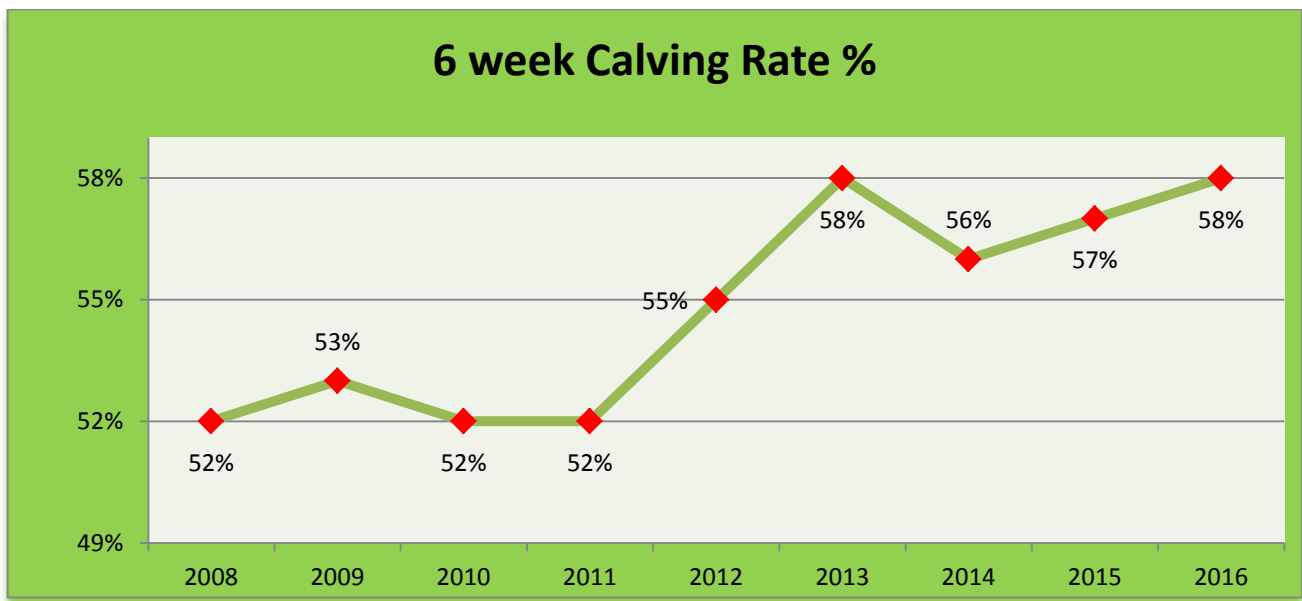
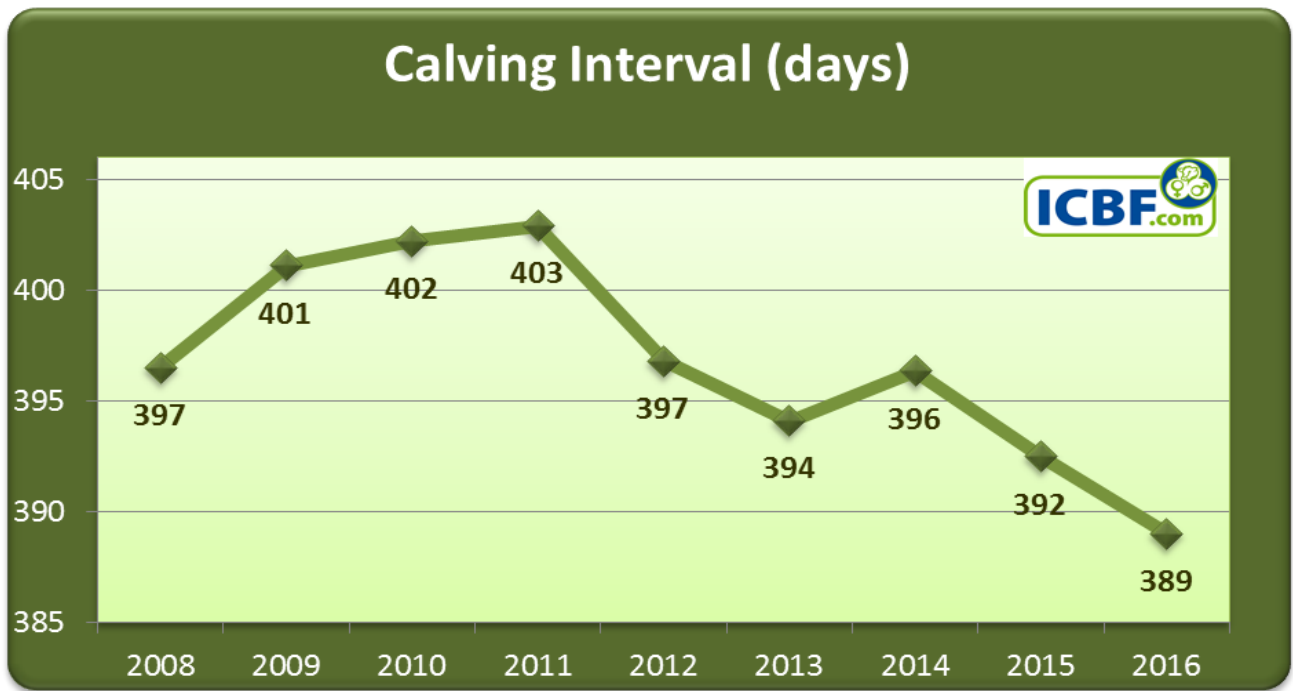
To breed replacement heifers with the genetics to drive profit on your farm.

How do I select the right AI sires for my herd?

- Determine the EBI of your herd from ICBF
- Identify weaknesses in herd performance from your Co-op Performance Report
- Decide on your breeding goals and work to achieve these e.g. fertility and higher milk solids
- Select genetic targets in line with your breeding goals e.g. bulls with fertility sub index of €120
- Only easy calving sires for heifers <1.8 C.D, 95% Reliability & 300+ Calving Records
- USE a Team of 6-8 high EBI bulls
- Consider the targets below when selecting AI sires

EBI target for bull selection	
EBI	€230 or higher
Fertility	€120
Milk Solids	+24 kg
Fat kg / %	14 kg & 0.14%
Protein kg / %	10 kg & 0.10%

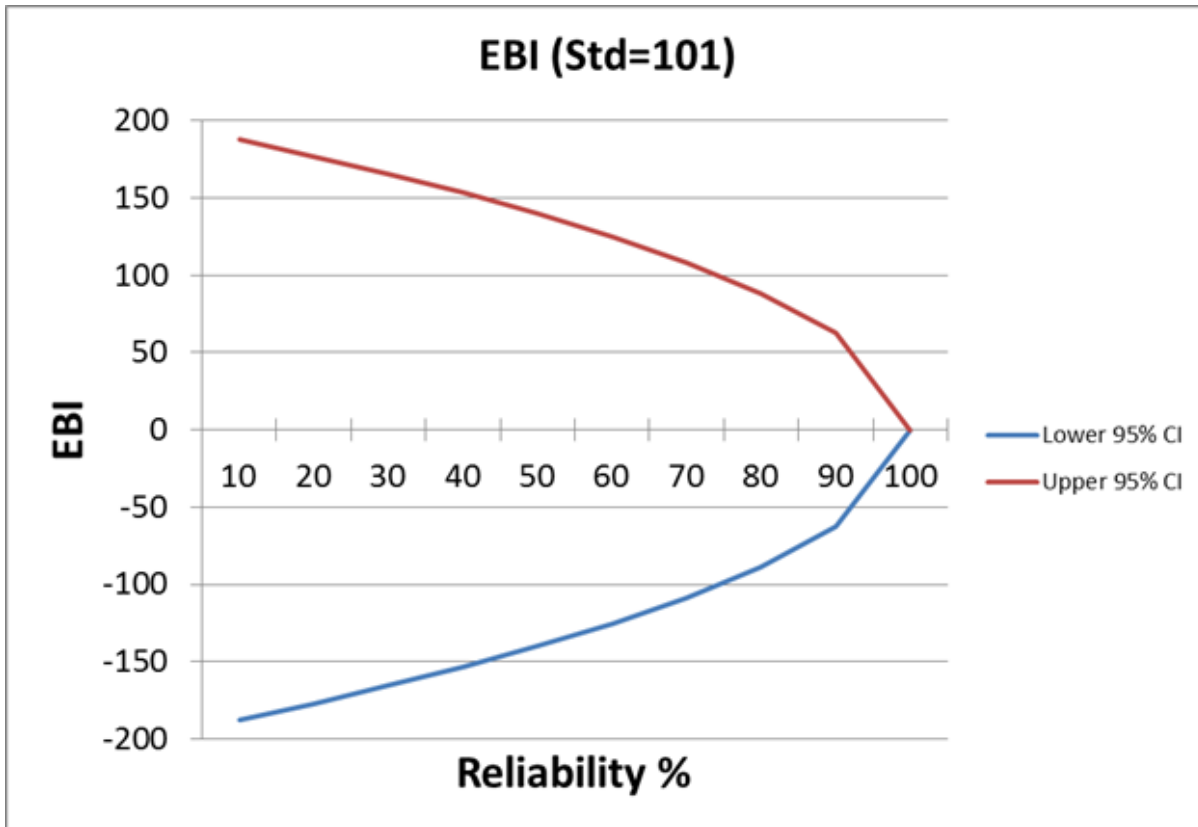
What has happened to Fertility Traits as a result of EBI



Why the changes in Genomic Proofs?

- A 15% increase in the size of the sire reference population against which the genomic prediction equations are generated.
- The inclusion of almost 1 million more fertility records from the 2017 calving season to date.
- Updates to the genomic evaluation systems and software from which the evaluations are generated.

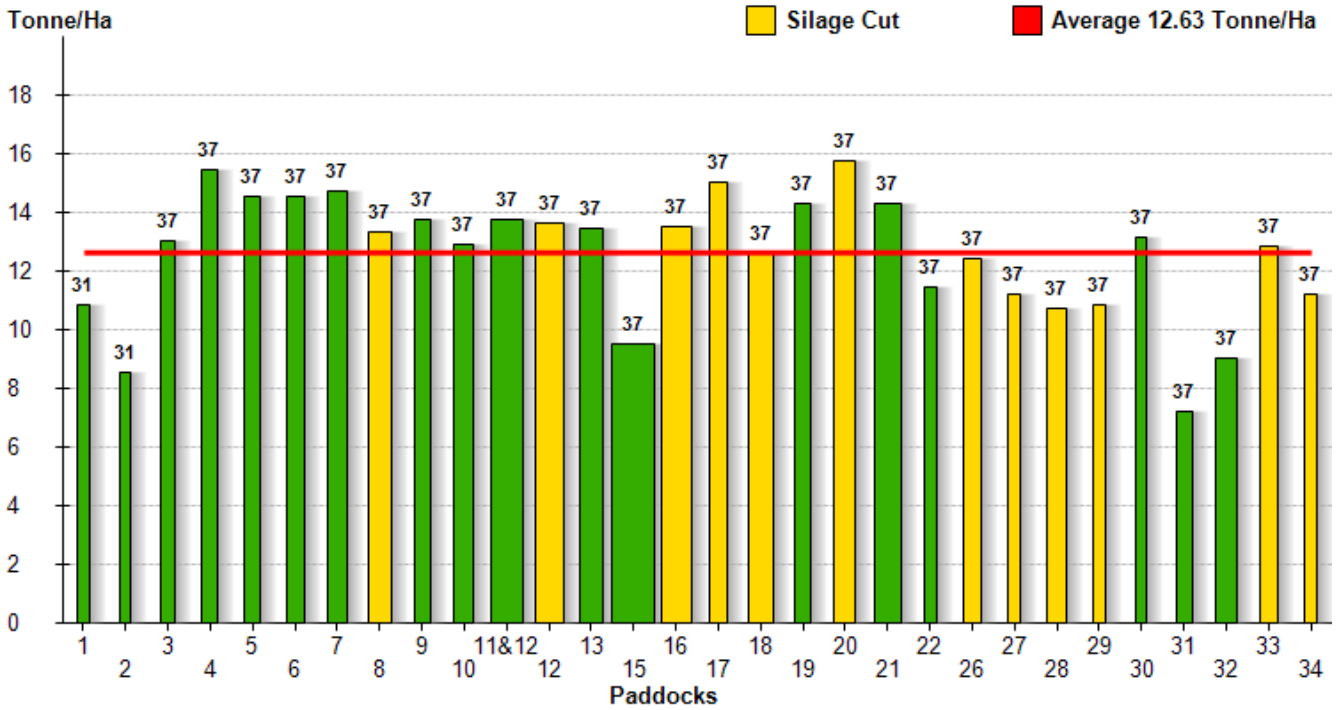
EBI values for bulls and cows will change due to reliability



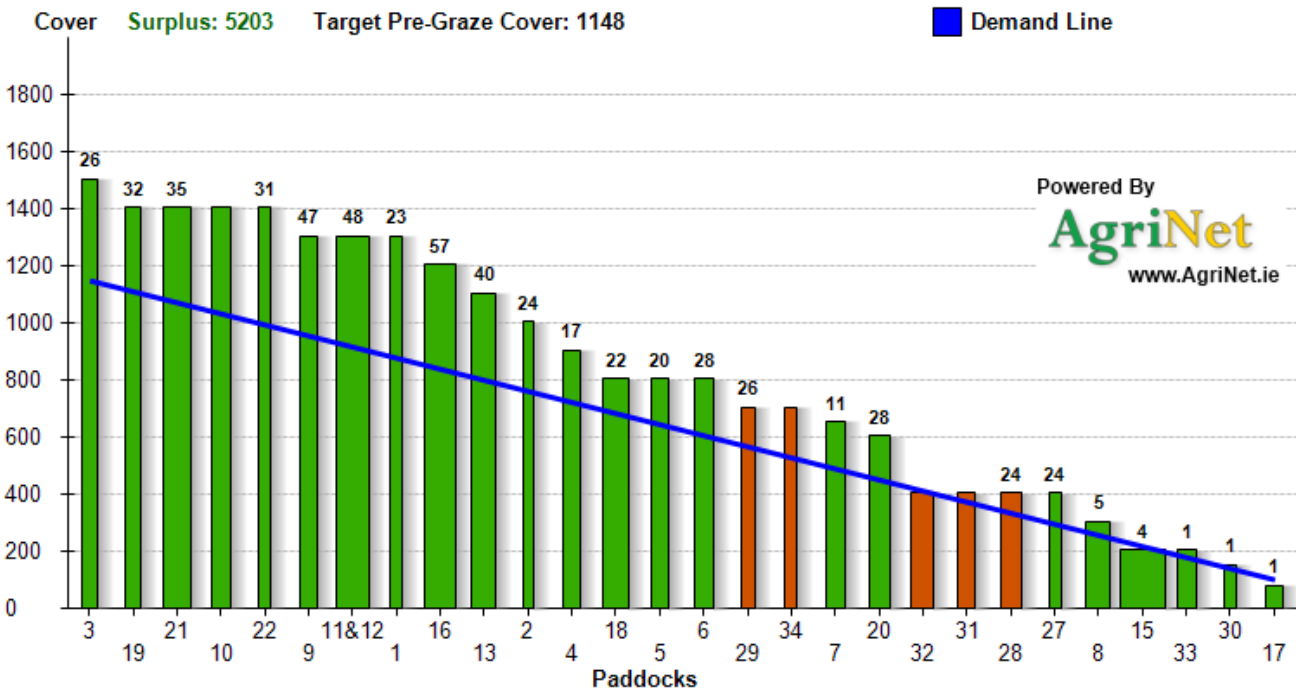
Body Condition Scoring

1 2.5	Cows too Thin	3%	<ul style="list-style-type: none"> • Handle in crush-pins, loins & ribs • Deal with thin cows – OAD • Identify, Leave with main herd, maintain feeding rates, • OAD until served
2.75 3.00 3.25 3.50	Ideal Service Score	90%+	
4.00 5.00	Cows too fat	2%	

Grass Grown 2016



Grass Wedge 10/4/2017



Key Data					
10-Apr-2017	802 Avg Cover	43.00 Growth	3.26 LU/Ha	30.45 Ltr/Cow	3.34% Prot
	100 Post Graze	49.90 Demand	245.74 Cover/LU	21 Days Rotation	4.29% Fat

FERTILITY & BREEDING MATTERS



By **DOREEN CORRIDAN**,
MVB MRCVS PhD, Munster Cattle Breeding

Stock Bull Purchase

1

Ensure enough bull power, this is crucial for compact calving, 1 young bull needed per 15-20 empty females. Our female numbers are increasing and our stock bull numbers have not increased accordingly.



2

Check his ease of calving index. In AI we are finding that for maiden heifers you need less than 2% difficult calving figure and for cows 4% or less. The reliability is lower in stock bulls and to be sure you need to try them out in cows in their first year for security.

<2% Calving difficulty

3

Buy him/them two months in advance of when needed, to allow for acclimatisation and disease testing.



4

Bulls are very susceptible to stress and sudden nutritional changes.



5

Footbath him/them on arrival to avoid introduction of Mortellora and pair him with another animal.



6

Vaccinate him/them with whatever the herd is being vaccinated for.



7

Get him/them fertility tested by your vet.



8

Monitor him/them throughout the breeding season. Young bulls need to be fed during the breeding season.



Notes

