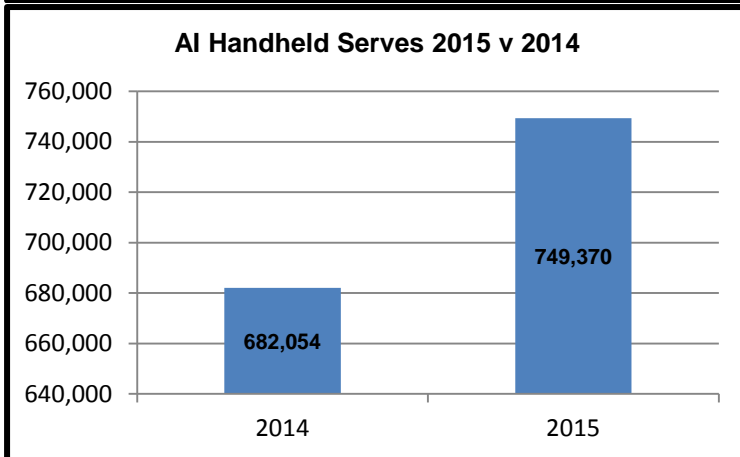
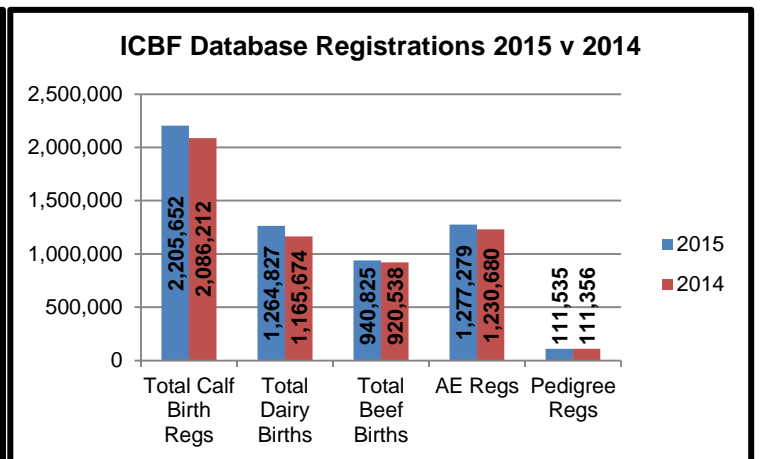
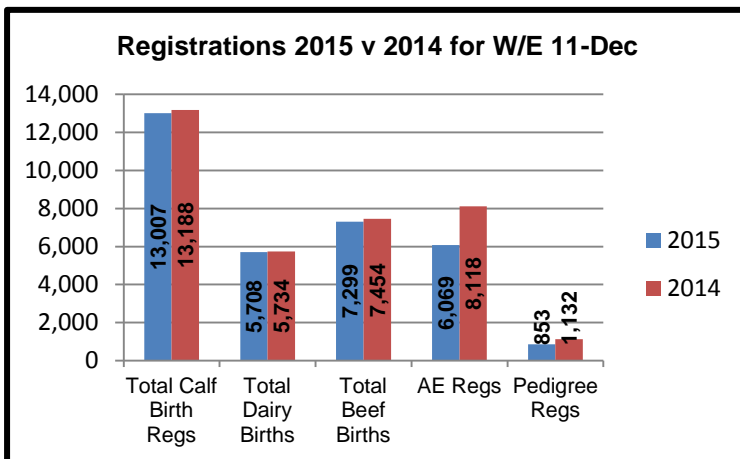


ICBF Weekly Update 11th December 2015

1 Important Dates

- ✚ **ICBF Board Meeting** – Thursday 21st January 2016, 10:30 Killeshin Hotel, Portlaoise.
- ✚ **Sheep Board Meeting** – Thursday 28th January 2016, at 14:00, Killeshin Hotel, Portlaoise.
- ✚ **Workshop on DNA Technologies in Agriculture in the Agri-Food industry** – Tuesday 15th December 2015, at 10.00am, Maldrone Hotel Portlaoise. – last few places available, please contact Donagh.berry@teagasc.ie

2 Database



- ✚ The stats above are compiled with the assistance of DAFM AIM systems.
- ✚ BVD test results continue to be received at ICBF and are being processed accordingly. There have been 2.34 million results received since January 1st, of which 14,403 have come in the last 7 days. Since the beginning of the voluntary phase in 2012, 7.29 million results have now been received.
- ✚ The chart shows Inseminations recorded on AI Handhelds in 2014 compared with 2015.

3 Genetic Evaluations.

- ✚ Results from the December routine evaluation for Dairy AI sires have been distributed to the industry on Thursday 10th December.
- ✚ The Beef AI sires file is nearing completion and will be distributed on Monday 14th December. It is anticipated the bull search, Active Bull Listings and herd profiles will be live with the new proofs on 21st December.

4 Beef Data and Genomics Programme (BDGP)

- ✚ This week's Irish Farmers Journal page is at the end of this update. The title of this week's article is "Fertility".

5 GENE IRELAND® Beef

Autumn 2015 Beef programme

- ✚ Sign Ups are continuing for the autumn 2015 Beef Programme.
- ✚ 242 herds taking a total of 4200 straws have joined so far.
- ✚ The Simmental bull KJG reached the 500 straws target this week.
- ✚ The average order is 17 straws per herd.
- ✚ The catalogue is available to view at the link below.
http://issuu.com/herdplus/docs/gi_beef_autumn_2015_catalogue
- ✚ To learn more or to order straws please phone **1850 600 900**.
- ✚ Approximate total straws ordered to date for the bulls are detailed in the table above.

Code	Name of Bull	Breed	Straws Ordered
AA2064	Carrigroe Kian	AA	375
AA2163	Liss Brendan	AA	145
AU2155	Slaneymill Jack	AU	295
CH2159	Bondi Jacob	CH	170
PDR	Dereskit Improver	CH	355
CH2154	Polar Joe 2	CH	55
HE2148	Ballyville Hamlet	HE	210
LM2156	Clonark Jumbo	LM	425
LM2151	Ballygarvan Stud Ike	LM	210
LM2116	Tomschoice Ironstone	LM	180
OEO	Ivoire	LM	90
ZKY	Kyle Herd Ivan	PT	350
PI2157	Kilree Leo	PI	110
SA2153	Highfield Odran	SA	270
SH2181	Coolvin Dominator	SH	25
SI2152	Curaheen Earp	SI	410
SI2158	Seepa Fionn	SI	305
ETP	Curaheen Evolution P	SI	270

6 Milk Recording

National Milk Recording Statistics - Herds, Cows & EDIY 11/12/15

Milk Recording Organisation	Total Herds Recorded YTD 11/12/15	No. EDIY Herds YTD 11/12/15	% Herds EDIY	Total No. Cows Recorded YTD 11/12/15	No. EDIY Cows YTD 11/12/15	% Cows EDIY
Munster	3,994	1,279	32%	369,701	126,952	34%
Progressive	2,516	1,081	43%	263,820	113,692	43%
Tipperary	127	54	43%	11,909	5,295	44%
Total	6,637	2,414	36%	645,430	245,939	38%

Recorded Cows by Milk Recording Organisation - Year on Year Comparison

Milk Recording Organisation	YTD 2014 Cows Recorded 01/01/14 - 11/12/14	YTD 2015 Cows Recorded 01/01/15 - 11/12/15	2015 vs 2014 Year on Year Difference (%)
Munster	337,272	369,701	9.6%
Progressive	247,100	263,820	6.8%
Tipperary	10,411	11,909	14.4%
Total	594,783	645,430	8.5%

7 Sheep Ireland

DNA Workshop and Breed Society Meeting Tuesday 15th December

- ✚ Final reminders for the above meetings have been circulated by email today. The DNA workshop will run through all the processes involved in delivering genomic evaluations. Should anyone reading this Weekly Update be interested in attending this meeting, please make contact with your breed society representative or contact us in Sheep Ireland.
- ✚ Our meeting with breed society representatives will take place after the DNA workshop on Tuesday. It is important that as many breed society representatives attend these meetings to help Sheep Ireland make the correct decisions, especially around our future plans for sheep genomics. This breed society meeting is an extremely important forum for all breed societies to have their say in sheep breed improvement. Should LambPlus breeders have any particular issues that they would like to see discussed, please contact your society representatives in advance of this meeting.

OVIGEN at the World Buiatrics Congress – Dublin 3rd – 8th July 2016

- ✚ One of the most important aspects of the OVIGEN research project is the amount of phenotypes being collected, especially health data, from LambPlus flocks all around Ireland. This data is hugely valuable and will lay the foundation for a future Health Index which will be displayed to farmers through the Euro-Star Indices. OVIGEN is also gaining attention from the genetics community worldwide as evidenced by the inclusion of a poster in the upcoming World Buiatrics Congress which takes place in Dublin (3rd to 8th July 2016). To learn more about this conference click [here](#) to find their website and to view the poster entitled ‘Genetic parameters for health traits in a multi-breed sheep population’, please click [here](#).

Sean Coughlan Chief Executive, ICBF & Sheep Ireland, Highfield House, Shinagh, Bandon Co. Cork., Phone: +353 238 820 222, Email info@icbf.com. **Registered Office:** Irish Cattle Breeding Federation Society Ltd trading as "ICBF", Highfield House, Shinagh, Bandon, Co Cork. Registered Dublin, Ireland. Registration Number 4914R, Industrial and Provident Societies Acts, 1893 to 1978. Web: www.icbf.com.
Registered Office: Sheep Database Ltd trading as "Sheep Ireland". Highfield House, Shinagh, Bandon, Co Cork. Registered Dublin, Ireland. Registration Number 465004, Companies Acts 1963 to 2006. Web: www.sheep.ie.

National Milk Recording Results for the 10 day period, 02-DEC-2015 To 11-DEC-2015

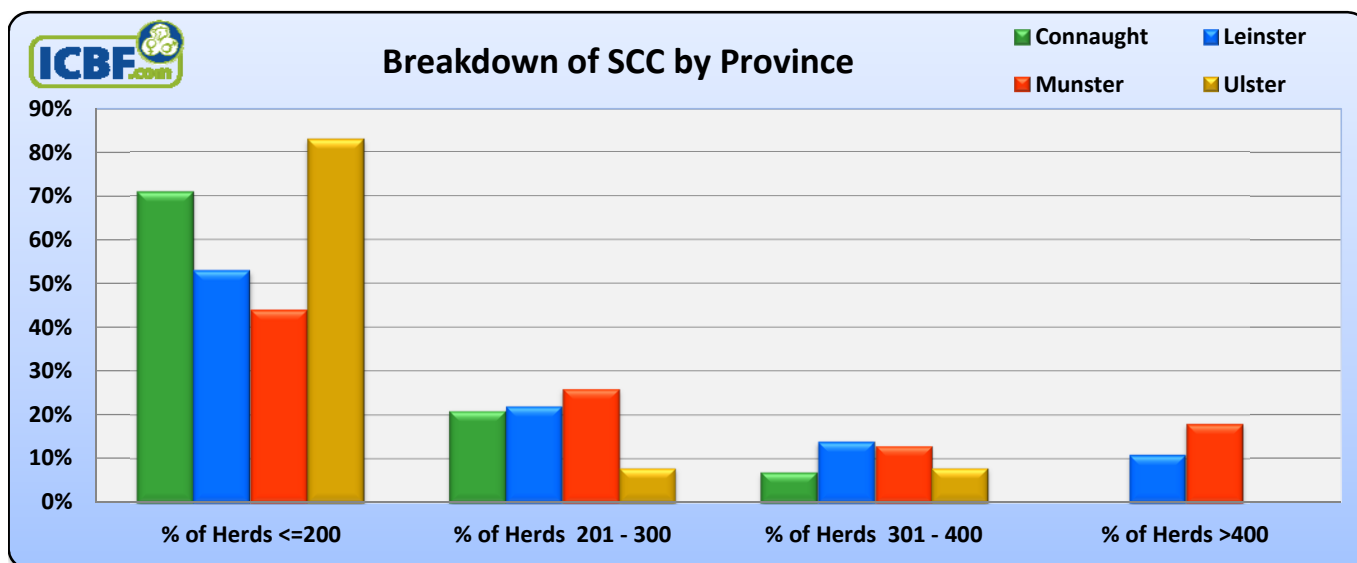
ICBF	No. Herds Recorded	No. Cows Recorded	Avg Herd Size	Avg Milk kg/Cow	Average Fat %	Average Protein %	Average F+P kg	Average SCC*
Connaught	14	772	55	18.6	4.15	3.42	1.42	153
Leinster	101	8,507	84	20.1	4.40	3.47	1.56	194
Munster	256	16,417	64	16.6	4.52	3.60	1.33	231
Ulster	12	599	50	18.9	3.90	3.39	1.37	135
National Statistics	383	26,295	69	17.6	4.46	3.56	1.39	214

* Geometric Mean Herd SCC

SCC Distribution for the 10 day period, 02-DEC-2015 To 11-DEC-2015

ICBF	No. Herds Recorded	No. Cows Recorded	Avg Herd Size	% of Herds <=200	% of Herds 201 - 300	% of Herds 301 - 400	% of Herds >400	Average SCC*
Connaught	14	772	55	71%	21%	7%	0%	153
Leinster	101	8,507	84	53%	22%	14%	11%	194
Munster	256	16,417	64	44%	26%	13%	18%	231
Ulster	12	599	50	83%	8%	8%	0%	135
National Statistics	383	26,295	69	49%	24%	13%	15%	214

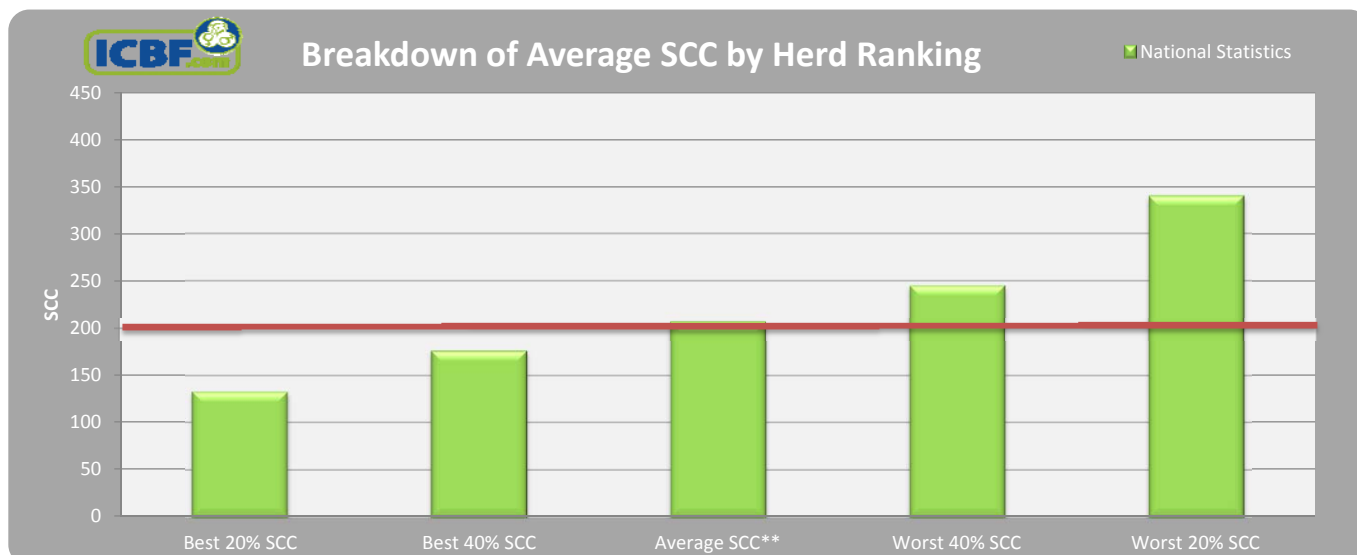
* Geometric Mean Herd SCC



% Herd Breakdown for the 10 day period, 02-DEC-2015 To 11-DEC-2015

ICBF	No. Herds Recorded	No. Cows Recorded	Avg Herd Size	Best 20% SCC	Best 40% SCC	Average SCC**	Worst 40% SCC	Worst 20% SCC
Connaught	14	772	55	107	154	158	177	250
Leinster	101	8,507	84	115	170	187	223	319
Munster	256	16,417	64	144	190	225	259	371
Ulster	12	599	50	83	122	128	137	173
National Statistics	383	26,295	69	133	176	207	245	340

** Percentile Herd SCC Rank (Median SCC)



Fertility

The focus of last week's article was weight recording and the importance of measuring the milking ability of suckler cows.

As well as a cow being able to produce enough milk to wean a heavy calf, it is important that she has the ability to produce a calf at the same time, or as close as possible to the same time, every year. Unfortunately, the average Irish suckler cow is falling well short of this target.

Table 1 details fertility targets as well as averages for the national herd and the top 15% of herds

Calving interval

The target is for a cow to calve, on average, every 365 days. At 407 days, the average cow is losing 42 days (six weeks) per year. A cow with a 407-day calving interval that calved for the first time in early January 2015 will not calve until mid-February 2016 and will slip to late March/early April by 2017 and so on.

Applying an average daily gain (ADG) of 1.25kg to the calf and assuming a set weaning date, this loss of 42 days equates to >50kg less weaning weight per year as a result of a prolonged calving interval.

Calves per cow per year

The target is to have each cow in the herd producing a calf per year. This can be difficult to achieve as even with the best genetics and management there is always the possibility of abortions, stillbirths, calf mortality, etc. An achievable target is 0.95 calves/cow/year. This

means that a 20-cow suckler herd should be aiming to wean 19 calves.

Percentage of heifers calved at 22-26 months

Less than one in five suckler heifers (18%) calves for the first time between 22 and 26 months. Even in the top 15% of herds this figure is as low as 42%. In the dairy herd, the figure stands at 56%.

Calving beef heifers between 22 and 26 months is an achievable target. To achieve this, you must ensure that heifers are heavy enough to breed at 15 months (60% of target mature weight) and that you use a proven, easy-calving bull(s). Using test AI bulls or young unproven stock bulls on heifers is not advised.

Replacement Index and fertility

Fertility traits such as age of first calving, calving interval and survival make up 23% of the Euro-Star Replacement Index. Recent analysis carried out by ICBF, which looked at the performance of suckler cows born in 2008 on key fertility traits, showed significantly better fertility from the high Replacement Index, five-star group over the low Replacement Index one-star group (see table 2 below).

The five-star animals calved for the first time at a younger age, have a better average calving interval, have produced more calves and have survived longer in herds. By breeding more high Replacement Index females, you are much more likely to achieve the fertility targets outlined earlier.



One of Ger's first calved heifers. She calved down unassisted at 23 months to an easy calving bull (3.5% calving difficulty). She is a LM x SI heifer and has a Replacement Index €174. She is sired by the Limousin AI bull Ozeus (OZS) and her heifer calf is sired by the Saler bull Ublo (S619).

Q&A

Q. Can you improve fertility through breeding?

Yes you can. Of course, environmental effects such as nutrition, body condition, heat detection etc. have a massive impact on fertility. Once these effects are removed, however, improvements can be achieved by using breeding animals with a higher genetic merit for fertility. The impact of the fertility element of the dairy EBI is testament to this.

Q. If I am looking for bulls to specifically improve fertility what should I look for in the Euro-Star Index?

The Replacement Index gives an overview of the suitability of a bull to breed replacements. It is the daughter calving interval trait which deals specifically with fertility. This figure is expressed as days of calving interval. You should aim for a negative figure here as you will be looking to take days off of your average calving interval. The more negative the figure is the better e.g. -3.2 is better than -1.9.

FARMER FOCUS: GER DINEEN

Weight and easy calving bulls are key to calving at 24 months

Name: Ger Dineen, Cill na Martra, Co. Cork
Farming System: Suckler to beef
4 and 5 Star Females: Cows: 40; Heifers: 29.
Stock Bull or AI: 100% AI
Replacement Strategy: Breed my own.

Why did you join the BDGP? I'm recording a lot of data in my herd such as weaning weights and insemination data and it's interesting to see how it influences the reliability figures on my cows. I'm interested to see what the impact of genomics will be and how I can use it as a tool for selecting future replacement females.

Tell me about the fertility performance of your herd? Going by my 2015 HerdPlus calving report I am fairly pleased. My average calving interval figure is at 376 days and calves/cow/year is at 1.01. I had two sets of twins this past Spring and didn't have any losses so that is why my calves/cow/year figure is over one. I started calving on the 19th Jan and finished on the 6th April which was an eleven week spread. Going by my 2015 AI dates, I hope to reduce this by two weeks in Spring 2016.

How do you achieve such high fertility performance and tight calving spread? My breeding strategy is based around 100% AI. A common problem with suckler cows is to get them back in heat after calving. About 2 weeks before the start of the breeding season (10th April) I separate my cows and calves and only allow access to suckle morning and evening. This breaks the maternal bond and I have found that it brings



Ger Dineen

cows into heat very quickly. I run my heifers with the cow herd to increase the mounting activity. I use scratch cards as a heat detection aid and I am very happy with them. The breeding season finishes by the last week of June and anything not in calf after this is culled.

What is your approach to calving heifers at 24 months?

There are two key things when it comes to calving heifers at 24 months; weight and easy calving bulls. Heifers have to be heavy enough for breeding at 15 months. I would aim to have all heifers well in excess of 400kg. You then have to ensure that you use easy calving bulls. AI gives me a lot of choice so I only use proven easy calving bulls on my heifers. I aim for less than 5% calving difficulty at over 90% reliability.

Table 1: Fertility targets and performance of the national suckler herd (2015).

	Target	National average	Top 15% of herds
Calving Interval	365	407	363
Calves/Cow/Year	>0.95	0.82	1
% Heifers Calved 22-26 Months	100%	18%	42%

Table 2: Analysis of fertility performance of 5 star v 1 star suckler cows born in 2008.

	Avg. Rep Index	Age 1st calving (days)	Avg. calving interval (days)	No. of calvings	Still alive in 2015 (%)
5 Star	€124	971	399	4.33	72%
1 Star	€8	1022	420	3.46	52%
Difference	€116	-51 Days	-21 Days	+0.87	+20%