*Best wishes for Christmas and the New Year
from all at ICBF and Sheep Ireland*
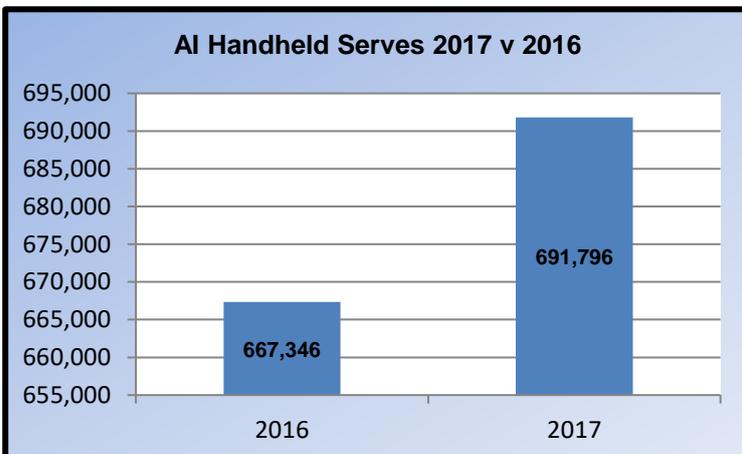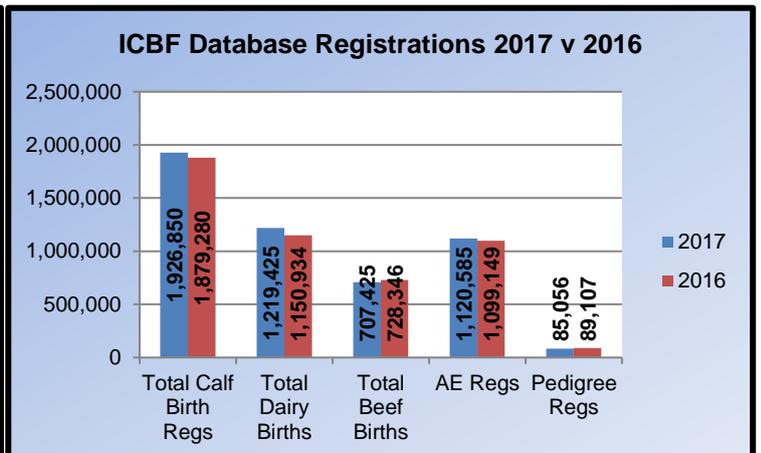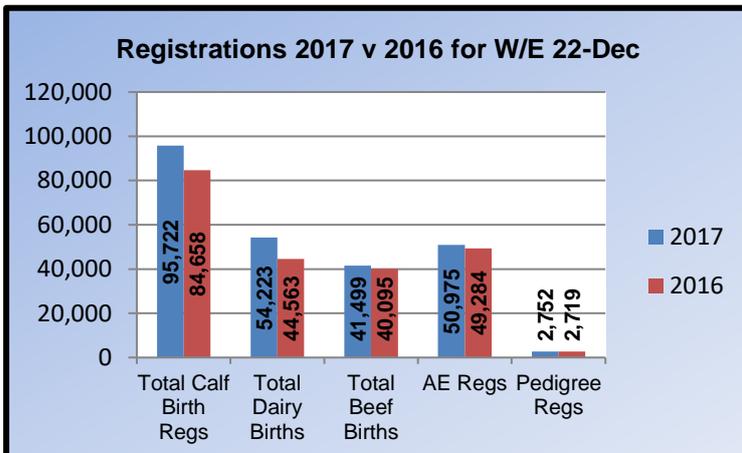
ICBF Weekly Update 22nd December 2017

1   Important Dates

- **Sheep Board Meeting** – Wednesday 24th January 2018 at 14:00, Killeshin Hotel, Portlaoise.
- **ICBF Board Meeting** – Thursday 25th January 2018 at 10:30, Killeshin Hotel, Portlaoise.

2   Database

Registrations 2017 v 2016 for W/E 22-Dec

Category	2017	2016
Total Calf Birth Regs	95,722	84,658
Total Dairy Births	54,223	44,563
Total Beef Births	41,499	40,095
AE Regs	50,975	49,284
Pedigree Regs	2,752	2,719

ICBF Database Registrations 2017 v 2016

Category	2017	2016
Total Calf Birth Regs	1,926,850	1,879,280
Total Dairy Births	1,219,425	1,150,934
Total Beef Births	707,425	728,346
AE Regs	1,120,585	1,099,149
Pedigree Regs	85,056	89,107

AI Handheld Serves 2017 v 2016

Year	Serves
2016	667,346
2017	691,796

- 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 2,287,276 results received since January 1st, of which 48,751 have come in the last 7 days. Since the beginning of the voluntary phase in 2012, 9,615,718 results have now been received.
- The chart shows Inseminations recorded on AI Handhelds in 2017 compared with 2016.

3   A Review of 2017

Despite some technical difficulties early in 2017, the progress in Irish breeding programmes acheived over the past 15 years through the power of collaboration across AI companies, Teagasc, DAFM, farmers, and ICBF was again demonstrated in 2017, with improved breeding continuing to deliver increased profitability at farm level. That progress is on-going and sets the dairy industry up very well to take further advantage of these gains in 2018.

On the beef side, the Beef Data and Genomics Scheme (BDGP) continued to operate very well. Genomic Evaluations for beef cattle continued to be used extensively by farmers in 2017, and in general, they have been well received by farmers. The evaluations are appearing on mart screens in over 40 marts around the country. The data from farm, mart, and factories continues to demonstrate that the Euro-Star indexes are working.

Adoption of dairy genomics at farm level continues to operate at very high levels. In 2017, 77% of some 700,000 recorded dairy inseminations were from genomically selected bulls. The results from both the Next Generation Herd in Moorepark, and the 'Daughter Proven' results continue to show that the genomic bulls are more profitable at farm level than daughter proven bulls, though the use of teams of bulls must be adhered to in order to reduce risk. The AI companies continue to invest very significantly in genotyping, ensuring that the best possible selection of young bulls are going into the Gene Ireland programme for progeny testing. This is key to the on-going validation of the genomic indexes, and to maintaining the on-going rates of genetic gain.

Our genetic evaluation activities continue to be at the very heart of ICBF's role in dairy and beef. Despite challenges earlier in the year, we have stronger and more robust systems in place at the end of 2017 than ever before. While the genotyping efforts of farmers will have a major impact on the reliabilites of our evaluations, they continue, however, to be at the mercy of good quality data for real progress to continue. The on-going roll-out of the Beef Data and Genomics Programme will play a key role in improving progress here.

The G€N€ IR€LAND® dairy progeny test program continued in 2017, continuing the process of getting cross-breds and pure black and white bulls tested in the same herds in order to try and get better data to help decision making. The implementation of a G€N€ IR€LAND® beef programme continued in 2017, and it continues to get good support from commercial farmers. Whole Herd Performance Recording (WHPR) took off in 2017 and is getting a very good response. The use of the related Stockbull Finder is continuing to grow in use on weekly basis.

The Tully Performance Test station has continued to operate very successfully. This year saw our first intake of heifers, along with ongoing testing of steers and bulls. Tully is also continuing to provide a rich stream of data in the area of meat eating quality, and, in conjuntion with Meat Technology Ireland, the results emerging have great potential in continuing to position Ireland as producers of top quality beef.

HerdPlus® membership has exceeded 26,000 dairy and beef herds. These herds have access to a wide range of valuable breeding information which farmers can use to breed more profitable cattle. The launch of the Cow's Own Worth in September has been extremely well received by farmers looking to make culling decsions. On the service income side, Milk Recording rebounded well in 2017 from a challenging 2016. AI uptake has continued to grow, thanks to excellent work by the service providers. Our Bull Search facility (on www.icbf.com) continues to be the facility on our website that farmers and breeders find most useful with, again, over 2,500,000 searches in the last twelve months.

We continue to do signficant development work in conjunction with Animal Health Ireland (AHI) in the area of IT infrastructure for management of the BVD, Beef Health Check, CellCheck and Johnes programmes. ICBF's ability to generate genetic evaluations for animals in relation to disease resistance is becoming an increasingly important area, and initial results are showing significant potential for genetics to assist with national animal health programmes. As such, our relationship with AHI will continue to be extremely important.

Summary

2017 has been another very exciting year in the cattle breeding community. There are many challenges ahead, but also lots of opportunity. The key to ICBF's success remains the same as ever - the application of good science, a focus on the needs of farmers, working closely with our stakeholders and a 100% commitment to delivering by a talented and dedicated team. We are most fortunate to operate in an environment where ICBF's vision is shared by our Board, our members, DAFM, Teagasc, and, most importantly, Irish Farmers.

4   Herd Plus®

+ Scanned your cows recently? You can now record 'Pregnancy Diagnosis' on ICBF.com. Click here for further details.

ICBF HerdPlus has just launched a new Weaning Performance Report for suckler farmers. This new report aims to help farmers identify their best 'beef producing' cows. Click here for more details.

The latest Dairy AI bull proofs are now available to view in excel format in the 'genetic evaluations section' of our website. Click here for more details.

5 Milk Recording

National Milk Recording Statistics - Herds, Cows & EDIY 22/12/17						
Milk Recording Organisation	**Total Herds Recorded YTD 22/12/17**	**No. EDIY Herds YTD 22/12/17**	**% Herds EDIY**	**Total No. Cows Recorded YTD 22/12/17**	**No. EDIY Cows YTD 22/12/17**	**% Cows EDIY**
Munster	3,900	1,289	33%	399,338	143,726	36%
Progressive	2,372	1,015	43%	278,657	120,305	43%
Tipperary	113	51	45%	11,856	5,304	45%
Total	**6,385**	**2,355**	**37%**	**689,851**	**269,335**	**39%**

Recorded Cows by Milk Recording Organisation - Year on Year Comparison			
Milk Recording Organisation	**YTD 2016 Cows Recorded 01/01/16 - 22/12/16**	**YTD 2017 Cows Recorded 01/01/17 - 22/12/17**	**2017 vs 2016 Year on Year Difference (%)**
Munster	368,820	399,338	8.3%
Progressive	261,606	278,657	6.5%
Tipperary	11,593	11,856	2.3%
Total	**642,019**	**689,851**	**7.5%**

6 Sheep Ireland - A Review of 2017

Happy Christmas to all readers of this Sheep Ireland Update. We would like to thank all LambPlus members, sheep breed societies, commercial sheep farmers and all industry stakeholders for their continued support. A lot of progress has been made in 2017 and we will aim to continue this in 2018.

Sheep Ireland (www.sheep.ie) continued to make excellent progress in 2017, with strong leadership from its Chairman, James Murphy, and a strong development team operating under the stewardship of Eamon Wall and Kevin McDermott. Commercial and pedigree farmers continue to become much more aware of the existence of the EuroStar indexes, and how they can play a significant role is removing the risk around ram purchases, and help the industry to ensure that it does not lose ground to other countries in terms of gains through genetic progress.

The commercial farms that make up the CPT programme have again put in a huge amount of work this year, and data coming from these farms is hugely valuable in generating accurate genetic evaluations for Sheep.

LambPlus has again expanded in 2017, and numbers are continuing to rise. This means that over 40% of the rams sold this year would have EuroStar figures available. The challgenge is to get this number to rise again in 2018, and current indications are that this is achievable.

In 2017, farmers continued to use Euro-Stars as a tool in their purchasing decisions on rams. We again had a very successful LambPlus Sale in Tullamore. The fact the Eurostar concept is similar to that in cattle also

helps in this regard. It is critical for the success of Sheep Ireland that (a) farmers use the indexes in their purchasing decsions and (b) that the performance of the sheep correlate with the indexes – i.e. high index sheep perform more profitably that low index sheep.

The output from the OVIGEN project is creating some very exciting opportunities for Sheep in the area of genomics, and we look forward to further reaping the rewards of this research in 2018 as we look to implement genomic evaluations for sheep.

Irish Sheep farming is benefitting from the unique partnership that exists between Government and the sheep industry. The ability of Sheep Ireland to put DAFM funding (leveraged by Farmer Funding) to good use is widely acknowledged, especially when we benchmark Sheep Ireland's work with what is happening elsewhere in Europe. Without DAFM support it would be impossible for Sheep Ireland to deliver to the industry and wider community. We are most fortunate to operate in an environment where Sheep Ireland vision is shared by our Board, DAFM, Teagasc, and, most importantly, Irish Sheep Farmers.
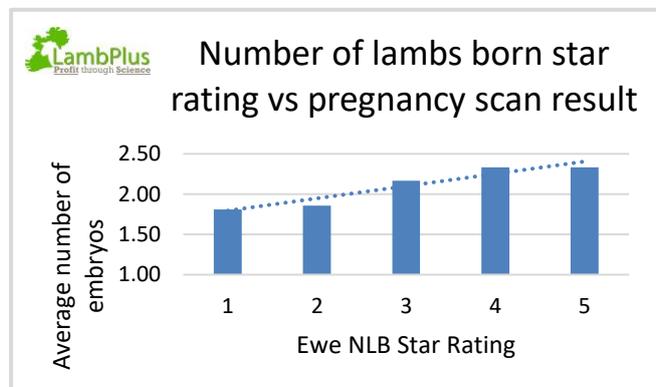
7   Sheep Ireland Update

LambPlus Flock Notebook

➕ This week, we circulated Flock Notebooks to all breeders that have signed up to LambPlus for 2018. Slight changes have been made to the notebook for this year. New traits to record have been included in the notebook, namely, Lamb Vigour, Mothering-Ability and Ewe Milk. In addition to these traits, there is also space available in the notebook to record Mating and Pregnancy records.   Adequate space is also provided in the notebook to record weights throughout the year and space to do a Health Check around mating time. The Flock Notebook is a very useful tool where you can record all the information that is required for your flock for the year.

Case Study – Shaun and Seamus Gahan, Graiguenamanagh, Co. Kilkenny

➕ Last Year we published a number of Case Study's based on pregnancy scanning results. We have decided to look at a few of these again this year. We plan to start with Shaun and Seamus Gahan of the Barrowlands Flock. The results are extremely encouraging. Click **here** for a full summary.

LambPlus Profit through Science

Number of lambs born star rating vs pregnancy scan result

Average number of embryos: 2.50, 2.00, 1.50, 1.00

Ewe NLB Star Rating: 1, 2, 3, 4, 5

Careers

➕ Sheep Ireland has a vacancy in our team for a Technical Support position. We are currently at our highest ever level of industry participation and entering a new and exciting era of genomics and mobile App recording. This would be a fantastic opportunity for someone to gain and improve upon a broad range of skills and be part of an ambitious, hard-working team. For more information on the position please see the careers page on our website. Closing date is Wednesday **18th January 2018.**

We would like to thank everybody for their contribution during the year and we look forward to another very productive year in 2018.

We close for Christmas on Friday 22rd December and return on Tuesday 2nd January 2018.

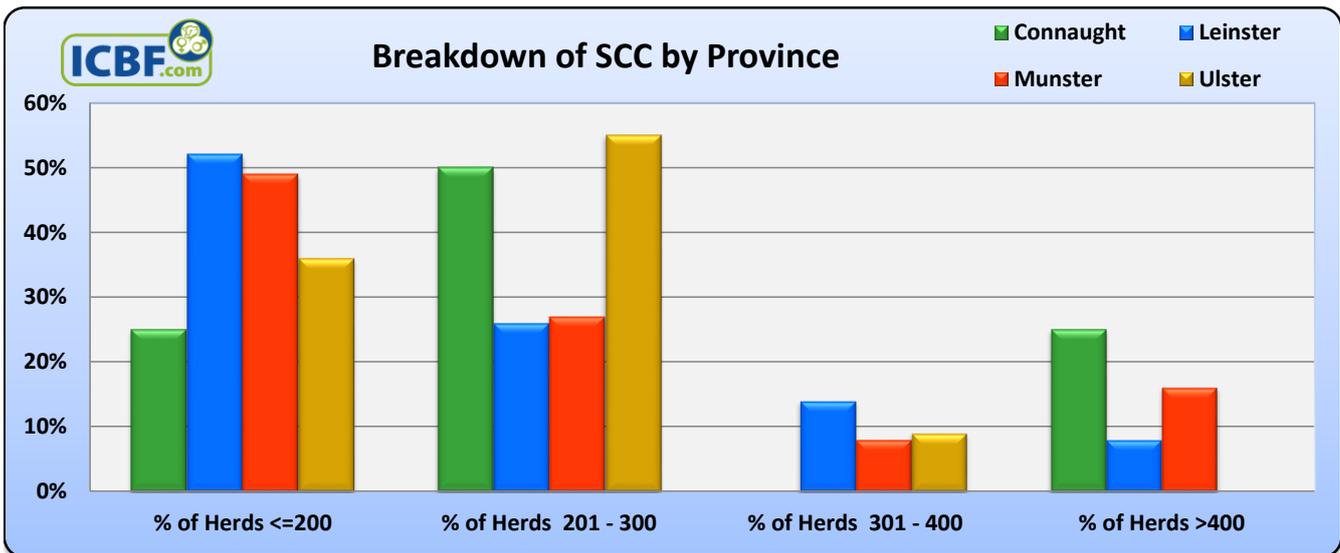## National Milk Recording Results for the 10 day period, 13-DEC-2017 To 22-DEC-2017

ICBF.com	No. Herds Recorded	No. Cows Recorded	Avg Herd Size	Avg Milk kg/Cow	Average Fat %	Average Protein %	Average F+P kg	Average SCC*
Connaught	4	263	66	21.9	4.24	3.38	1.67	275
Leinster	77	7,092	92	19.5	4.53	3.59	1.56	194
Munster	134	10,673	80	18.4	4.53	3.59	1.48	201
Ulster	11	704	64	18.8	4.43	3.65	1.50	194
National Statistics	226	18,732	83	18.9	4.52	3.59	1.51	199

* Geometric Mean Herd SCC

SCC Distribution for the 10 day period, 13-DEC-2017 To 22-DEC-2017

ICBF.com	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	4	263	66	25%	50%	0%	25%	275
Leinster	77	7,092	92	52%	26%	14%	8%	194
Munster	134	10,673	80	49%	27%	8%	16%	201
Ulster	11	704	64	36%	55%	9%	0%	194
National Statistics	226	18,732	83	49%	28%	10%	13%	199

* Geometric Mean Herd SCC

Breakdown of SCC by Province

% Herd Breakdown for the 10 day period, 13-DEC-2017 To 22-DEC-2017

ICBF.com	No. Herds Recorded	No. Cows Recorded	Avg Herd Size	Best 20% SCC	Best 40% SCC	Average SCC**	Worst 40% SCC	Worst 20% SCC
Connaught	4	263	66	191	216	238	260	399
Leinster	77	7,092	92	115	167	199	218	316
Munster	134	10,673	80	112	175	205	225	321
Ulster	11	704	64	166	219	229	230	270
National Statistics	226	18,732	83	114	176	202	225	317

** Percentile Herd SCC Rank (Median SCC)

Breakdown of Average SCC by Herd Ranking