

1 Important Dates

- ✚ **High Health Status Beef Bull Sale**- Saturday 15th October 2011 – 12:00 to 2:00 - Tully Performance Test Centre.
- ✚ **ICBF Board Meeting**-Thursday 20th October, 10:30 to 14 :00 – Maldron Hotel, Portlaoise.
- ✚ **Breeding Consultation Industry Meetings**-Thursday 17th November 11:00 to 17:00 – Killeshin Hotel, Portlaoise.
- ✚ **Audit & Finance Sub-Committee Meeting**-Thursday 24th November, 10:00 to 14 :00, Horse & Jockey.

2 Sheep Ireland

On Thursday the Interim Board of Sheep Ireland approved the development of a proposal for a more permanent structure. This followed a Sheep Industry meeting held earlier the same day at which a report of progress to date and plans for the future were discussed. A copy of the presentation to that meeting is available in the publications section of www.sheep.ie. Please note that slide 24 has been corrected following identification of an error in the original analysis

The series of Round Table discussions with users of the LambPlus service was also completed this week. In the course of these meetings we identified a number of opportunities to improve the quality of the LambPlus service. These included:

Web/IT issues

- ✚ Changes to make the web system more user friendly.
- ✚ Ram web-search facility to give potential ram buyers access to rams in LambPlus flocks.
- ✚ Addition of a slaughter data entry screen.
- ✚ New flock reports for growth and genetic trends.
- ✚ Further development of the use of Handheld computers for collecting data on ram breeding farms.

Genetic Evaluation

- ✚ Education of ram breeders & commercial ram buyers using: media, website improvements and Teagasc - Advisory, Athenry, and Colleges.
- ✚ Importance of getting pedigree flocks linked to boost genetic evaluation accuracy.

Scanning

- ✚ Scanning is an essential part of best practise for ram breeding.
- ✚ Restrict entry to Sheep Ireland sales to scanned rams only.
- ✚ Improved 'branding' of scanned animals – education.
- ✚ Society to impose "rule" to scan all recorded animals.
- ✚ Clear message to go from Sheep Ireland that scanning is best practice for ram breeders
- ✚ Improved planning to facilitate 'area scanning' and thus reducing cost.

- ✚ Re-tendering of the scanning contract - to reduce cost.
- ✚ Scanning seen as an essential way of verifying 'honest' recording
- ✚ Improved timing of scanning - many breeders scanned too late in 2011.
- ✚ Scanning of all lambs to improve the information being collected and to reduce the cost of scanning overall.

Education & Promotion

- ✚ Feeling that breeders & farmers do not yet understand the Euro-Stars.
- ✚ Breed societies to help promote recorded rams, in association with Sheep Ireland.
- ✚ Producer group incentives to recorded ram buyers.
- ✚ Increased level of communication with public needed to illustrate the benefits that we have recorded and to detail trends of genetic gain from using 5 Star Vs. 1 Star rams.

Sheep Ireland Ram Sale

- ✚ Essential education & publicity tool.
- ✚ Increase minimum ram entry level for 2012.
- ✚ Additional sale venues giving 2 or 3 in total.
- ✚ Greater level of Pre & Post sale publicity needed including use of Classified advertisements.
- ✚ Increase number of rams for each breed so that there is a good selection available for commercial buyers.

Other topics discussed

- ✚ Role of breed societies - support is essential to further progress.
- ✚ Factory data - very important for significant progress to be made.
- ✚ Across breed comparisons – not ready yet but being re-evaluated annually.
- ✚ CT scanning - potential for LambPlus.
- ✚ Importation and use of foreign evaluation data.
- ✚ Necessity of NSIS check letter in the recording process – look to develop web screens to make recording easier and to keep errors low – maintain file of tags purchased and used / not used.
- ✚ Suggestion that Flock Books move to use of NSIS tags in place of tattoos.

3 Travel Report

Andrew Cromie was part of a recent study tour to New Zealand. A copy of his travel report focusing on topics relevant to cattle breeding is attached.

4 Tully

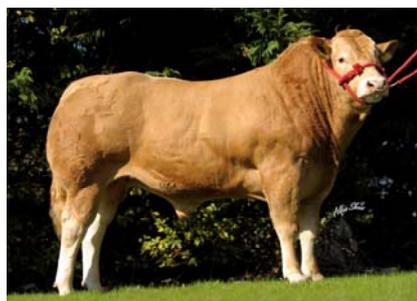
Tully Bull Sale

The Champion bulls (pictured) will be among the 49 bulls on offer at the Tully high health status sale on Saturday, 15th October, which consists of 3 Blonde d'Aquitaine, 1 Saler, 4 Angus, 18 Limousin, 15 Charolais, 6 Simmental & 2 Belgian Blue.

All measurements at Tully are incorporated in the Euro-Star indexes to give more accurate genetic evaluations whilst also increasing the reliability on key production traits. Also, bulls at Tully boost a high health status as they are tested negative for IBR, BVD, Johnes, EBL, TB and Brucellosis. On the day of sale bulls will be between 13 and 18 months of age. The average weight across breed for the 49 bulls catalogued is 730kg.



Belgian Blue Bull: Hawksford Eoin, sired by Ober Van Het Hubkeshof and owned by Henry O' Connor, Ballaghaderreen, Co Roscommon.



Blonde d'Aquitaine Bull: Mountbrown Flint, sired by Ballinascrew Armani and owned by Philip Lyons, Westport, Co. Mayo.



Charolais Bull: Redgate Folengo, sired by Thrunton Voldemort and owned by Eugene Egan, Ballyfin, Co Laois.



Limousin Bull: Glebe Farm Franco, sired by Ampertaine Brigadeer and owned by John Fahy, Tuam, Co Galway.



Saler Bull: Corlurgan Kemp, sired by Scorpion and owned by Fernand Crowe, Ballinagh, Co. Cavan.



Simmental Bull: Curaheen Bronson, sired by Milton Lord-Tiffany ET and owned by David Wall, Newcastle, Co. Dublin.

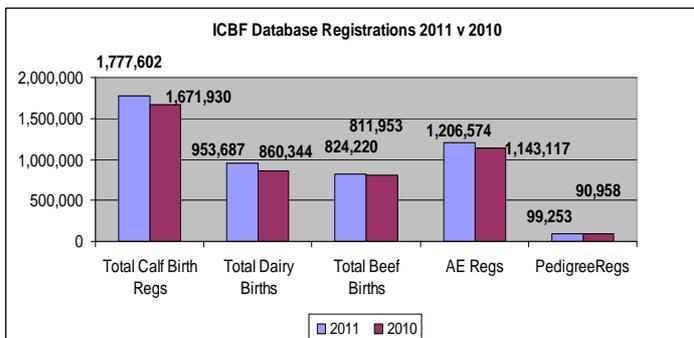
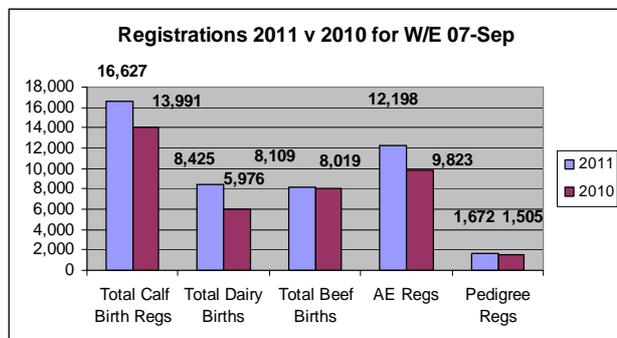


Angus Bull: Templequain Lord Jake K798, sired by Luddenmore Fionn G441 and owned by Martin Costigan, Portlaoise, Co. Laois.

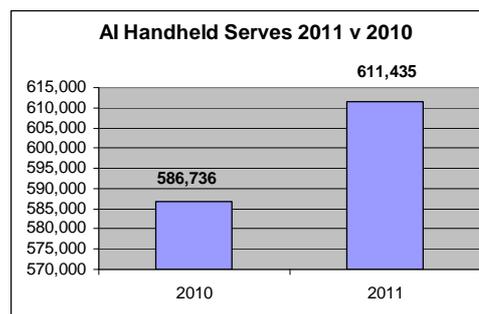
Location

The sale is located minutes from Kildare town, exit 13 of the M7 motorway. For more information or a copy of the catalogue, contact Stephen or Niall on 045 521573. The catalogue is also available at <http://www.icbf.com/services/tully/index.php>. On the day of sale bulls will be between 13 and 18 months of age.

5 Database



- The stats above are compiled with the assistance of DAFF AIM systems.
- In the Suckler scheme, the number of 2011 born calves with meal introduced is 329,641 with the number of animals weaned at 73,955.
- Around 1,000 herds have already completed their Dairy Efficiency Programme (DEP) health recording requirements for 2011 (500 paper, 500 electronically). There are around 6,500 herds in the DEP.
- Testing continues on the prototype of a new cattle weighing scales with blue-tooth integration to ICBF handheld software. The platforms have arrived today and field trials have begun.
- Significant work is also on-going in relation to the farmer upload and download of data to existing scales out on farms (e.g. Tru-test scales)
- The loading of the high density beef genotype files to the ICBF Database is ongoing.
- The graph shows Inseminations recorded on AI Handhelds in 2011 compared with 2010.



6 Milk Recording

National Milk Recording Statistics - Herds, Cows & EDIY 07/10/11						
Milk Recording Organisation	Total Herds Recorded YTD 07/10/11	No. EDIY Herds YTD 07/10/11	% Herds EDIY	Total No. Cows Recorded YTD 07/10/11	No. EDIY Cows YTD 07/10/11	% Cows EDIY
Munster	3,670	1,041	28%	302,124	95,067	31%
Progressive	2,377	904	38%	215,173	81,960	38%
Tipperary	144	64	44%	13,091	6,308	48%
Total	6,191	2,009	32%	530,388	183,335	35%

Recorded Cows by Milk Recording Organisation - Year on Year Comparison			
Milk Recording Organisation	YTD 2010 Cows Recorded 01/01/10 - 07/10/10	YTD 2011 Cows Recorded 01/01/11 - 07/10/11	2011 vs. 2010 Year on Year Difference (%)
Munster	275,944	302,124	8.7%
Progressive	192,317	215,173	10.6%
Tipperary	11,930	13,091	8.9%
Total	480,191	530,388	9.5%

National Milk Recording Averages by Province - 10 day Period 27/09/11 to 07/10/11								
Provincial	No. Herds Recorded	No. Cows Recorded	Average Herd Size	Average 24hr Milk kg/Cow	Average Fat %	Average Protein %	Average F + P kg	Average SCC
Munster	1012	71,574	71	17.3	4.32	3.78	1.40	272
Leinster	283	21,495	76	19.9	4.17	3.62	1.55	326
Connacht	77	4,599	60	18.6	3.97	3.56	1.40	226
Ulster	61	3,461	57	18.4	4.14	3.65	1.43	326

National Milk Recording Results by County - 10 day Period 27/09/11 to 07/10/11								
	No. Herds Recorded	No. Cows Recorded	Average Herd Size	Average 24hr Milk kg/Cow	Average Fat %	Average Protein %	Average F + P kg	Average SCC
CARLOW	9	514	57	18.5	4.25	3.66	1.46	444
CAVAN	42	2,140	51	19.3	4.13	3.63	1.50	306
CLARE	39	2,179	56	18.1	4.05	3.71	1.40	250
CORK STH	270	18,323	68	16.6	4.44	3.83	1.37	250
CORK NTH	283	19,937	70	17.9	4.39	3.85	1.47	258
DONEGAL	6	686	114	15.9	4.45	3.78	1.31	358
DUBLIN	2	78	39	26.5	4.18	3.42	2.01	123
GALWAY	29	2,134	74	15.5	4.40	3.64	1.25	252
KERRY	135	8,552	63	17.3	4.13	3.66	1.35	290
KILDARE	16	1,188	74	25.5	4.00	3.44	1.90	408
KILKENNY	44	3,535	80	17.4	4.23	3.71	1.38	282
LAOIS	26	1,621	62	16.9	4.38	3.70	1.37	332
LEITRIM	7	346	49	18.2	3.93	3.35	1.32	238
LIMERICK	125	8,753	70	18.8	4.12	3.74	1.48	288
LONGFORD	7	374	53	18.6	4.31	3.84	1.52	266
LOUTH	16	1,571	98	25.7	3.95	3.55	1.93	331
MAYO	30	1,600	53	21.8	3.76	3.64	1.61	235
MEATH	52	4,703	90	18.0	4.40	3.66	1.45	313
MONAGHAN	13	635	49	19.9	3.85	3.53	1.47	313
OFFALY	25	1,674	67	17.5	4.44	3.70	1.42	413
ROSCOMMON								
SLIGO	11	519	47	18.7	3.80	3.59	1.38	178
TIPPERARY NTH	34	2,597	76	15.1	4.69	3.91	1.30	292
TIPPERARY STH	74	5,379	73	16.2	4.40	3.79	1.33	256

WATERFORD	70	5,854	84	15.8	4.72	4.00	1.38	285
WESTMEATH	16	1,192	75	18.0	4.32	3.63	1.43	295
WEXFORD	47	3,438	73	17.8	4.13	3.72	1.40	300
WICKLOW E	16	958	60	18.4	3.98	3.53	1.38	330
WICKLOW W	7	649	93	20.3	3.89	3.50	1.50	400
	No. Herds Recorded	No. Cows Recorded	Average Herd Size	Average 24hr Milk kg/Cow	Average Fat %	Average Protein %	Average F + P kg	Average SCC
National	1,451	101,129	69	18.7	4.20	3.67	1.47	296

Brian Wickham (PhD) Chief Executive, ICBF & Sheep Ireland, Highfield House, Shinagh, Bandon Co. Cork., Phone: +353 238 820 222, Mobile: +353 86 826 9911, Email bwickham@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.

New Zealand Study Tour – Summary of Key Outcomes.

Background.

- The New Zealand (NZ) dairy industry has more than doubled in size over past 25 years, from just over 2 million cows in 1985 to 4.2 million cows in 2011. The dairy industry now accounts for 25% of total NZ exports and is valued at some €7 billion. As an industry it is focused on low cost seasonal production systems. It has a very developed cattle breeding infra-structure, with 80% of herds on milk recording and 70% of dairy replacements by AI bred sires.
- A study tour was organised by the Irish Farmers Journal to identify what lessons could be learnt from NZ, as the Irish dairy industry gears up towards herd and industry expansion post quota's (2015+). Particular areas of focus where;
 - Farm and industry partnership models that promote growth and expansion.
 - Latest technical developments, including research and extension work.
 - Land development and reclamation.
- The study tour took place from Sunday 18 September to Wednesday 28 September, and included visits to;
 - Dairy New Zealand (a farmer funded industry good organisation responsible for research and advisory),
 - Livestock Improvement Corporation (a farmer owned cattle breeding co-operative funded through income from cattle breeding services),
 - Fonterra (the farmer owned milk processing co-operative which purchases 95% of the milk produced in NZ),
 - Massey University (including an invited seminar for post graduate students in animal breeding),
 - Lincoln University (the dairy research farm at Ashburton),
 - 10 individual farms and,
 - 3 farmer meetings (with groups of NZ dairy farmers and people from the NZ dairy industry).
- A total of nine people travelled from Ireland including me.
- The following is my summary of ten key outcomes of particular relevance for cattle breeding.



Key cattle breeding outcomes.

1. **Industry structure.** Genetic evaluations in NZ are undertaken by the New Zealand Animal Evaluation Unit (owned and operated by Dairy NZ). Dairy NZ are also owners of the core database (which includes data on animal ancestry, calving dates, milk recording and genetic merit). However, this database is currently operated by LIC. In addition, LIC have added considerable value to the database in terms new traits (e.g., insemination data), including the application of genomic evaluations. Some of these traits are included in the industry economic index (the Breeding Worth), which raises additional questions regarding ownership of the Breeding

The Irish study group on the farm of Greg & Rachel Roadley, Ashburton.

Worth. All of this is resulting in considerable angst within the NZ dairy industry, as the key players (Dairy NZ, LIC, other commercial AI companies and farmers) grapple with complex issues around independence, governance, access to the database (including the related genomic evaluations) and the issue of commercial business versus industry good practices. The learning outcome from an ICBF perspective is the absolute necessity for us to maintain a clear distinction between our role as industry good organisation providing database, genetic evaluation and breeding program services to the industry, with that of commercial businesses which derive their income from ICBF services, including most notably data from genetic evaluations.

2. **Female fertility.** Female fertility is an issue of increasing concern amongst NZ dairy farmers. These concerns have been supported by data from New Zealand Animal Evaluation Unit (NZAEL) which have indicated a general decline in genetic merit for female fertility over the past 10-15 years. Given the importance of female fertility for seasonal calving systems (and the fact that as an industry, the majority of our foreign semen is from NZ), these results confirm the need for ICBF and the wider dairy industry to continue its focus on this important trait.

3. **Genomics.** There is increasing acceptance of the important role that females will have in future genomic evaluations, both in terms of elite females but also as animals on which to base genomic predictions. An example of this, are plans by LIC to genotype some 25k females (calved animals) from their Sire Progeny Test herds, with a view to integrating these animals into their genomics program (this work will be funded by LIC). These developments are akin to our plans with the GEN€IR€LAND program, with the exception that we intend to genotype younger animals (it will be 2-3 years before we have data on these animals), plus we require the farmers to make some contribution to the overall cost of the genotyping. Perhaps there is some logic in ICBF also considering the genotyping of older cows (with high quality phenotypes) as these animals could then be used quickly in our research and training work. By targeting larger herds in the GEN€IR€LAND program, we could also develop a prototype system for parentage verification (using SNP's), as this is something that these herd-owners would see additional value in as it would assist them in establishing 100% accuracy in dam-calf combinations at the time of birth. The offering of a parentage verification service, would also allow us move more quickly into across breed dairy evaluations, as many of the large herds are also the herds that have been using a high proportion of Jersey and Norwegian Red semen. This is something that we should strongly consider as we look to develop our genomic plans over the next 1-2 years.



The famous All Black herd of kiwi-cross cows, owned by John Lynskey, Taranaki.

4. **Semen technology.** Using fresh semen technology, LIC are able to produce, on average, 15-20k doses on one-year-old males. This has important implications for our AI industry as it suggests that some 20-30 bulls could

service the requirements of our National AI technician service each Spring (e.g., some 300k dairy inseminations were recorded through our AI technician service in Spring 2011).

5. **Once a day milking.** There is an increasing interest in the potential role of “once-a-day” milking in NZ due its reduced labour requirements, lower cow energy requirements (i.e., less energy for milk production and for walking) and lifestyle benefits. Much of the discussion is currently centring on “which traits”, with a PhD program started at Massey University. It is probable that traits such as mastitis resistance, low SCC, udder ligament and lactation persistency will become more important for these systems. These discussions have considerable relevance for Ireland as it is highly probably that many Irish dairy farmers will consider “once-a-day milking” in the run-up to quota abolition in 2015, as they look to increase the number of animals on their farms. Quite what happens after that is unclear as some may choose to stay with this system of milk production. If that is the case, then ICBF should consider some research work in this area.
6. **Economic models.** The economic values in the Breeding Worth are due to be reviewed this year by a team involving scientists from Massey University, Abacus Bio and LIC. At the same time, ICBF and Teagasc will be reviewing the economic values in the EBI. Given the similarities in production systems between Ireland and New Zealand, there would be considerable benefit to both countries adopting an “open and sharing” approach to each of these reviews, as there would be significant synergies for all partners.
7. **Information systems.** NZ dairy farmers are well served with information from both DairyNZ (in terms of herd summary and financial management) and LIC (in terms of herd summary and individual animal data). However, the systems are not well integrated which is somewhat frustrating for farmers and the wider industry. In many ways the scenario is not dissimilar to what exists in Ireland, where Teagasc operate the herd summary and financial management systems (through e-profit monitor) and ICBF operate the individual animal data (through ICBF HerdPlus and related service providers). Perhaps there is an opportunity for ICBF and Teagasc to work more closely together in this area, to remove duplication (particularly in the areas of data recording and data reporting) and provide an overall improved service to dairy farmers and the wider industry. Alongside this is the issue of “real-time” data, which is absolutely critical in NZ, where the owner or manager is very often once removed to the day to day tasks of calving, milking and breeding cows. In such scenarios, these people need quick and easy recording and reporting of key performance indicators, such as cows calved, cows bred, cow and calf wastage, bulk milk solids produced and bulk SCC. In theory these are reports that we could quickly generate for Irish farmers. However, to be most effective we would require daily files from milk processors, which is something that we receive on only a limited basis. The benefits of having this data on a real time basis would be significant as we look to provide our database users with relevant and up to date information.
8. **Extension.** In addition to the regular work of consulting officers and discussion groups, Dairy NZ has identified two new areas to focus their extension activities. These include; (i) working with private consultants and vets (based on a “train the trainer” approach) and (ii) social networks, where through a process of one-one interviews with farmers they aim to identify “key people” within the industry that farmers look to for guidance and advice. These people would then be followed up with for directed advice/support, including potentially hosting a farm walk or presenting to farmer groups. Although still at an early stage, both approaches would appear to be proving successful with average “solid engagement” with farmers having increased from 25% to 40% in last 2 years. As we look to grow the business of cattle

breeding in Ireland (including uptake of ICBF HerdPlus), clearly these are example of approaches that we should consider.

9. **Next generation herds.** During our trip we visited two dairy farms that were formed from stakeholder initiatives; the Lincoln University Dairy Farm (an initiative involving 6 industry stakeholders) and the Taranaki Rugby Charitable Trust (an initiative involving 4 industry stakeholders). Both initiatives have been very successful on returning a positive net return on capital invested and on garnering industry and community support. The key message from both these initiatives is the absolute necessity to separate the management and technical direction of the initiative, from that of the stakeholder interests. This is a critical point as we look to establish a series of next generation herds in Ireland within the GEN€IR€LAND program.
10. **Cow efficiency.** This is an important trait in NZ, where the objective is to have cows that produce high kg output (milk or meat) per kg body weight. The need to identify efficient cows is particularly relevant in beef cows as this sector is now competing directly against dairy and beef for available energy (in terms of land and feed). In an effort to better understand the problem Massey University have initiated an interesting study comparing the suckler beef performance of 4 groups of cows; (i) pure Angus cows (the heaviest group – 477 kg), (ii) Angus & Friesian cross cows (453 kg), (iii) Angus & Kiwi-cross cows (430 kg) and (iv) Angus * Jersey cows (the lightest group – 411 kg). At this stage the efficiency ratio (defined at kg calf weaned/kg cow) of the 4 groups of cows is 41% for the pure Angus (calf weaning weight at 168 days was 198 kg), 52% for the Angus * Friesian, 51% for the Angus * Kiwi cross and 52% for the Angus * Jersey, indicating that in all cases the 1st crosses from the dairy herd were more efficient than the pure-bred in terms of cow efficiency. These initial findings are highly relevant given the ongoing discussions in Ireland regarding Suckler cow type and the potential role of females from the dairy herd.

Summary.

Overall, the study was an excellent opportunity to get latest industry, research and extension findings from one of the most forward thinking cattle breeding countries in the world. We look forward to integrating some of the key messages into our work over the next 1-2 years and to building a better cattle breeding infra-structure for future generations of dairy and beef farmers.

Andrew Cromie
6th October 2011