



## **UPDATE – for period 12<sup>th</sup> – 18<sup>th</sup> July 2008**

### **1 Important Dates**

- ✚ **Tue. 26<sup>th</sup> August, 10:30** – Beef Industry Genetic Evaluation Consultation Meeting. Venue to be advised.
- ✚ **Monday 25<sup>th</sup> to Wednesday 27<sup>th</sup> August** – Sheep breeding consultation meetings, Tullamore Court Hotel.
- ✚ **Thursday 18<sup>th</sup> September** – ICBF Board meeting 10:30 to 14:00.
- ✚ **Thursday 18<sup>th</sup> September** – Interim Sheep Board meeting 14:00 to 17:00.
- ✚ **23<sup>rd</sup> to 25<sup>th</sup> September** – Ploughing Championships, Kilkenny.
- ✚ **9<sup>th</sup> to 11<sup>th</sup> October** – World Holstein Friesian Conference hosted by Ireland at Killarney & Millstreet. For details see [www.ihfa.ie](http://www.ihfa.ie).
- ✚ **11<sup>th</sup> and 12<sup>th</sup> October** – International Beef Expo being hosted in Ireland at Kilkenny Mart.

### **2 ICBF Board Meeting**

The Board of ICBF met on Thursday. Class “C” shareholders (Breed Associations) have appointed Doreen Corridan, John O’Sullivan and Richard Whelan to the Board.

The subjects considered and decisions made at the meeting included:

- ✚ The lack of progress in establishing the Herd Health scheme is severely impacting on the operation of Tully. The Board acknowledged that breeders and herd owners are ready to carry their fair share of the costs and requested that the Chief Executive and Breed Associations take all reasonable steps to encourage DAFF to progress the establishment of the scheme.
- ✚ An examination of the potential of Genomic selection resulted in the following recommendations being adopted by the Board:
  - a. That ICBF’s strategy be to provide active leadership and to work with the Irish cattle industry in the harnessing of DNA technologies for the benefit of farmers and the breeding industry.
  - b. That a Genomic Selection task force be established by ICBF and the Irish cattle breeding research community to deliver cost beneficial services which exploit developments in DNA based technologies.
  - c. That a national DNA tissue bank be established for use in future beef and dairy cattle breeding research and that DNA containing samples be added to the bank from all animals likely to have a significant number of progeny performance recorded in Ireland.
  - d. That a campaign to secure DNA samples (or 56K Illumina chip results) for use in genomic research from all dairy bulls with accurate genetic evaluations in Ireland.
  - e. That a facility for DNA storage, extraction and genotyping be secured on a long term basis to underpin both research and the provision of DNA based services.
  - f. That the ICBF database be extended to support research into genomic selection and the provision of DNA technology based services to the breeding industry.
  - g. That ICBF explores all possible options for increasing the size of the training populations available for dairy and beef genomic breeding value estimation.
  - h. That the ICBF genetic evaluation system be extended to incorporate genomic information in order to ensure the highest possible accuracy and freedom from bias of its genetic evaluation services to all customer groups.
  - i. That a review of the optimal breeding scheme be undertaken and used as the basis for decisions on the 2009 and subsequent Gene Ireland schemes.



- The Irish delegation to the ICAR and Interbull meetings held in Niagara Falls in June provided a report to the Board. A copy of this report is attached.

### 3 Interim Sheep Board

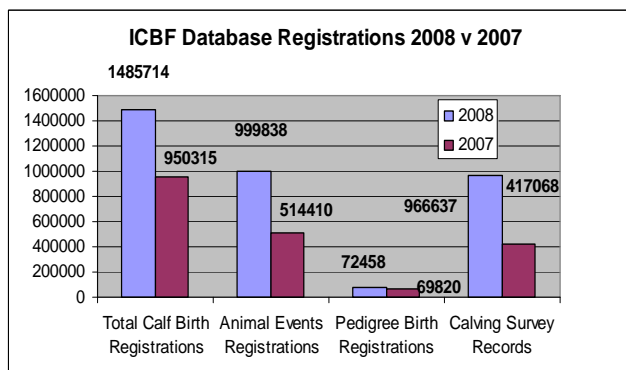
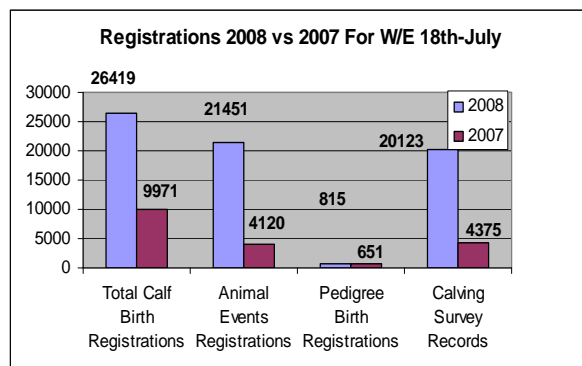
The first meeting of the Interim Sheep Board was held on Wednesday this week. Members of the Board are: Ignatius Byrne (acting chairman), Larry Barrett, James Brosnan, Henry Burns, John Joyce, Kevin Kinsella, and Anne Murphy.

Also attending the meeting were Brian Wickham (Chief Executive) and Oliver Molloy (Secretary).

Decisions taken and actions agreed include:

- Funding from DAFF is available to allow work to commence.
- To refine the ICBF proposal for sheep breeding through a process involving breeders and all with an interest in sheep at a workshop scheduled over the period 25<sup>th</sup> to 27<sup>th</sup> August, 2008.
- To meet with TEAGASC and to establish an effective working relationship covering research, advisory and education.
- To review financial projections and consider the name of the organization at the next meeting.
- A website and separate weekly update will be established specifically for sheep in due course.

### 4 Database Update



- 451,969 inseminations have been received so far in 2008, compared with 311,563 in 2007 for the same period.
- The work on reviewing the AI software for next season is underway. We will be communicating the plans with the AI handheld users over the coming weeks.
- Over 500,000 birth registrations from new Animal Events users have been received as part of the Suckler Scheme. Over 37,000 herds have received pre-weaning forms. Over the coming couple of weeks, all herds will be receiving their pre-weaning forms.
- The re-designed linear scoring and weight recording report is now in the final stages of testing.
- A number of new developments have continued this week, including a revamp of the bull search output, further development of the Gene Ireland application, and the update of the milk recording data entry screens.
- The EBI profile on the HerdPlus screens has been updated with some new features.
- The extract process for the next evaluation run has largely been completed this week.



- This week, the '1 millionth' AI serve was recorded on the AI handhelds. The picture below shows (left to right): Christy Dillon (Munster AI Technician), John Moloney (ICBF Handheld Support), and Denis Roche (Dairy Farmer).



## 5 Tully

- The first IBR test of the June intake to Tully took place on the 16-7-08 and results will be back before the 23-7-08.
- The next IBR test will take place on the 23-7-08.
- The final list of bulls that entered Tully will be sent out to breed societies before the 23-7-08.

## 6 Genetic Evaluations

- Evaluations for the next routine run are under way. These will be on-going over the next number of weeks and progress will be updated weekly.
- Ross Evans spoke about the beef indexes and the impact the suckler scheme will have in providing valuable information towards genetic improvements in the coming years at a Teagasc Beef farm walk in Kerry. About 200 farmers were present at the event.
- Work continues on improvements to the beef evaluation that were outlined at the beef herdbook meeting last week. This includes work on handling ET calves/donor cows, including foreign data in the evaluation, and linear traits.

## 7 Milk Recording

National Milk Recording Results by County - 10 day Period 08/07/08 to 18/07/08.

	No. Herds Recorded	No. Cows Recorded	Average Herd Size	Average 24hr Milk kg/Cow	Average Fat %	Average Protein %	Average F + P kg	Average SCC
<b>CARLOW</b>	14	1,040	74	23.6	3.73	3.32	1.66	313
<b>CAVAN</b>	48	2,569	54	23.9	3.7	3.33	1.68	313
<b>CLARE</b>	31	1,575	51	22.9	3.73	3.35	1.62	274
<b>CORK STH</b>	281	17,879	64	22.4	3.83	3.42	1.62	274
<b>CORK NTH</b>	218	14,811	68	22.3	3.87	3.39	1.62	300



**National Milk Recording Results by County - 10 day Period 08/07/08 to 18/07/08.**

	<i>No. Herds Recorded</i>	<i>No. Cows Recorded</i>	<i>Average Herd Size</i>	<i>Average 24hr Milk kg/Cow</i>	<i>Average Fat %</i>	<i>Average Protein %</i>	<i>Average F + P kg</i>	<i>Average SCC</i>
DONEGAL	24	2,121	88	22.8	3.84	3.34	1.64	294
DUBLIN	6	336	56	24.5	3.74	3.42	1.75	384
GALWAY	28	1,869	67	25.5	3.62	3.22	1.74	364
KERRY	123	7,753	63	24.6	3.71	3.31	1.73	320
KILDARE	18	1,189	66	25.2	3.69	3.37	1.78	236
KILKENNY	52	3,371	65	21.8	4.09	3.46	1.65	228
LAOIS	35	2,316	66	21.5	4.04	3.48	1.62	321
LEITRIM	6	262	44	25.6	3.55	3.22	1.73	218
LIMERICK	117	7,600	65	23.3	3.68	3.35	1.64	284
LONGFORD	10	687	69	24.4	3.69	3.32	1.71	213
LOUTH	28	1,974	71	22.3	3.77	3.33	1.58	288
MAYO	37	2,036	55	26.8	3.05	3.34	1.71	406
MEATH	39	3,266	84	21.5	4.16	3.48	1.64	441
MONAGHAN	56	3,101	55	24.9	3.73	3.3	1.75	304
OFFALY	19	1,512	80	22.3	4.19	3.38	1.69	303
ROSCOMMON	3	212	71	29	4.1	3.2	2.12	250
SLIGO	11	451	41	26	3.21	3.3	1.69	354
TIPPERARY NTH	56	4,018	72	22.1	3.99	3.43	1.64	297
TIPPERARY STH	38	2,504	66	22.8	3.86	3.44	1.66	249
WATERFORD	55	4,705	86	21.4	3.97	3.49	1.60	269
WESTMEATH	18	1,791	100	20.2	4.18	3.35	1.52	246
WEXFORD	61	4,221	69	22.3	3.76	3.41	1.60	249
WICKLOW E	16	1,031	64	19.9	3.65	3.38	1.40	305
WICKLOW W	14	1,074	77	24.1	3.74	3.41	1.72	253
	<i>No. Herds Recorded</i>	<i>No. Cows Recorded</i>	<i>Average Herd Size</i>	<i>Average 24hr Milk kg/Cow</i>	<i>Average Fat %</i>	<i>Average Protein %</i>	<i>Average F + P kg</i>	<i>Average SCC</i>
National	1,462	97,274	67	23.4	3.79	3.36	1.68	295

**National Milk Recording Averages by Province - 10 day Period 08/07/08 to 18/07/08.**

<b>Provincial</b>	<i>No. Herds Recorded</i>	<i>No. Cows Recorded</i>	<i>Average Herd Size</i>	<i>Average 24hr Milk kg/Cow</i>	<i>Average Fat %</i>	<i>Average Protein %</i>	<i>Average F + P kg</i>	<i>Average SCC</i>
<b>Munster</b>	919	60,845	66	22.7	3.83	3.40	1.64	283
<b>Leinster</b>	330	23,808	72	22.6	3.88	3.39	1.64	291
<b>Connacht</b>	85	4,830	57	26.6	3.51	3.26	1.80	318
<b>Ulster</b>	128	7,791	61	23.9	3.76	3.32	1.69	304



National Milk Recording Statistics - Herds, Cows & EDIY 18/07/08						
Milk Recording Organisation	Total Herds Recorded YTD 18/07/08	No. EDIY Herds YTD 18/07/08	% Herds EDIY	Total No. Cows Recorded YTD 18/07/08	No. EDIY Cows YTD 18/07/08	% Cows EDIY
Progressive	2,211	885	40%	173,822	67,360	39%
Dairygold	1,626	575	35%	116,232	42,817	37%
Kerry	1,155	246	21%	77,307	15,967	21%
SWS	910	131	14%	59,864	8,921	15%
Tipperary	171	72	42%	12,744	5,644	70%
Arrabawn	154	137	89%	12,453	10,483	84%
Connacht	146	53	36%	8,959	3,059	34%
Donegal	46	46	100%	4,164	4,164	100%
<b>Total</b>	<b>6,419</b>	<b>2,145</b>	<b>33%</b>	<b>465,545</b>	<b>158,415</b>	<b>34%</b>

Recorded Cows by Milk Recording Organisation - Year on Year Comparison				
Milk Recording Organisation	YTD 2006 Cows Recorded 01/01/06 - 18/07/06	YTD 2007 Cows Recorded 01/01/07 - 18/07/07	YTD 2008 Cows Recorded 01/01/08 - 18/07/08	2008 vs 2007 Year on Year Difference (%)
Progressive	149,977	159,937	173,822	13.7%
Dairygold	100,507	108,019	116,232	7.1%
Kerry	68,436	69,974	77,307	9.5%
SWS	57,218	59,149	59,864	1.2%
Tipperary	11,540	12,034	12,744	5.6%
Arrabawn	10,712	11,587	12,453	7.0%
Connacht	8,374	9,315	8,959	-4.0%
Donegal	4,861	3,552	4,164	14.7%
<b>Total</b>	<b>411,625</b>	<b>433,567</b>	<b>465,545</b>	<b>6.9%</b>

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# ICAR & INTERBULL

*Report of Conference*

*Niagara Falls 16<sup>th</sup> to 20<sup>th</sup> June 2008*

*Irish Cattle Breeding Federation*

*16<sup>th</sup> July 2008.*

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### 1 Background

ICBF is the Irish member of ICAR and Interbull.

ICAR (International Committee for Animal Recording) operates through a number of Sub-Committees (one of which is Interbull), Working Groups (one of which is Interbeef) and Task Forces. Its main role is the development of guidelines and the facilitation of communication at the international level in the general area of farm animal recording.

ICAR has 80 members from 50 countries.

Interbull is focused on genetic evaluations and it is best known for its international genetic evaluation service provided from the Interbull centre which is part of the Swedish University of Agricultural Science. Interbull holds an annual meeting – which alternates between jointly with ICAR and EAAP.

ICAR meets annually with alternating large and small meetings. The large meetings include Interbull and all other ICAR groups. The smaller meetings are primarily for the AGM and now include a workshop of particular interest to one section of ICAR membership (the one last year was held in Italy and was of particular interest to Milk Recording).

The joint ICAR and Interbull meeting was held this year in Niagara Falls from 16<sup>th</sup> to 20<sup>th</sup> June 2008.

Irish representation at the meeting was:

<b>Name</b>	<b>Organisation</b>
John O'Sullivan	Chairman of ICBF
John Comer	Board member of ICBF
Brian Wickham	CE of ICBF, Chair of Interbeef
Andrew Cromie, Martin Burke, Ross Evans, Thierry Pabiou	ICBF Staff – all involved in presenting papers.
Tom Corcoran	Chairman of NCBC
Bernard Eivers	CE of NCBC
Pat Mulvehill	CE of Munster Cattle Breeding Group
John Carty	DAFF
Donagh Berry	TEAGASC, Research, Moorepark

The purpose of this paper is to provide the Board of ICBF with a summary of the most significant issues addressed at the conference and possible implications for Ireland.

## **2 Genetic Evaluations – Interbull**

### **2.1 Service Expansion**

New services currently at various stages of development include international evaluations for:

- Milking speed & temperament
- Body condition score & locomotion
- Calving traits for Simmental

### **2.2 Lameness data from hoof trimmers.**

Although we have already initiated a project in this area, some German results presented at the conference demonstrated the real benefits of recording lameness data from hoof trimmer via PDA based systems. The work has shown a strong genetic component to lameness, indicating real possibilities for progress on this trait for Irish farmers.

Interbull results indicate a genetic correlation of zero between locomotion score and lameness. The figure assumed in Ireland is 0.4. We need to reconsider our assumptions based on data on lameness and locomotion scores.

### **2.3 Workability traits.**

The conference has demonstrated the need for ICBF to take a more “farmer focused” approach to recording workability traits such as milking speed, temperament & farmer satisfaction. As a result we will be initiating a project to record this data through GEN€IR€LAND progeny test herds this summer.

### **2.4 Gestation Length.**

Work from the US has indicated that this trait has an intermediate optimum, with longer gestation length bulls having higher calving difficulty and shorter gestation length bulls having higher calf mortality. We need to quantify if similar trends are apparent based on Animal Events data and if so, reconsider how best to use gestation length data in our breeding programs.

### **2.5 Overall Type Traits & Composite Traits**

In light of work conducted in other countries Ireland needs to examine the use of the relationship between type traits and survival as the basis for building composite trait indexes for mammary, feet & legs and overall.

### **2.6 Genomic Selection**

Refer to Board paper (17<sup>th</sup> July 2008) dedicated to this topic.

### 3 Milk Recording

#### 3.1 Growing service uptake

To grow Milk Recording to next level, Ireland needs to provide back up advisory services after recording – this seems to be the main difference between Ireland and countries with 80% - 90% milk recording. Other benchmark countries have excellent field services but not such a well integrated database. Ireland has very well integrated database but field services are behind best practice.

Irish farmers and their advisors do not make full use of the information available on herd reports. There are important roles for recorders, advisor and veterinarians. Progress in achieving better use of information will help retain and recruit milk recording service users.

#### 3.2 Adequacy of laboratory facilities

Start feasibility review for centralised testing in order to facilitate improved efficiency of testing (some 2.5 million samples per year in Ireland) and testing for a wider range of milk attributes from milk samples.

Laboratory systems are becoming capable of an ever-increasing range of measurements of potential value to herd owners. These include:

- Identification of mastitis causing organisms (using DNA technology)
- Testing using bulk, pooled and individual samples for diseases including Johnes, BVD, Salmonella, Leptospirosis, and Leucosis.

Some laboratories are able to develop and improve services by having a close relationship with research organizations (eg GD lab in NL). They are able to keep up with new technology and developments internationally.

#### 3.3 Milk recording data collection

A number of countries have electronic (PDA, mobile phone, data handler) data collection systems for use by recorders thus eliminating the need for office processing of milk weights. Ireland should review the options available and conduct field trials of the system(s) which are easiest to use and are well integrated with the database.

#### 3.4 Guidelines & Approvals

New ICAR Milk Recording limit of error for milk yield in milk meters has been changed from 2.5% to 5%. Bias is still maintained at <2%.

ICAR approved devices to now carry an ICAR approval stamp.

#### 3.5 Single sample for milk composition

Results from Polish research suggest a possible method for use in Ireland to project 24 hour milk composition from a single night or morning sample.

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### 4 AI Working Group

Guidelines for recording barcodes on semen straws are ready for publication. Draft has been circulated to AI studs in Ireland for comment.

Irish AI centres should review their straw printing facilities to support the bar code standard.

Batch data should be recorded by the ICBF AI Handheld system.

The ICBF Handheld system should be extended to facilitate straw barcode reading.

### 5 New Technologies

#### 5.1 Electronic Identification

There has been rapid development of electronic tagging systems. Victoria in Australia has made a lot of progress with these systems. It is now time for Ireland to seriously consider making an electronic option available and to establish the key infrastructure to exploit the benefits of this technology. Electronic ID is being introduced in Northern Ireland from Sept '08.

The benefit of electronic ID is in facilitating data recording as part of routine operations including: milk recording, AI, veterinary treatment, disease testing, Marts and meat factories.

ICBF should actively encourage electronic ID and ensure its data capture systems (EDIY milk recording, AI handhelds, dairy and beef linear scoring & weight recording) are modified to take advantage of this technology.

The EU needs to take a standard approach to electronic ID and avoid a range of non-compatible systems proliferating.

#### 5.2 On-farm data recording

There is a proliferation of systems for collecting data during milking and at other times. These are generally linked with electronic ID and provide information for a range of farm management decisions affecting reproduction, feeding, and health. Some of these systems include in-line or parlor analyses of milk components (yield, solids, somatic cells, conductivity, blood, progesterone etc).

ICAR is establishing a group to develop guidelines for on-farm analyses with a view to have a draft completed by the end of 2008.

ICBF needs to ensure its database systems facilitate the flow of data to and from these systems.

### 6 Certificate of Quality

This is a new service from ICAR and replaces the "Special Stamp" used previously. It provides an internationally recognised measure of quality and Ireland should give

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serious consideration to seeking it for all key aspects of its recording and genetic evaluation systems.

### **7 General Feedback**

Those attending made the following comments:

- Great chance to catch up on developments worldwide in milk recording and genomic selection.
- Opportunity to meet many people and to gain knowledge from them.
- Great atmosphere and good to see so many people totally committed to doing the right thing for farmers.
- Very helpful in demonstrating the capability of ICBF on the world stage.
- Good that Ireland was well represented as this sends the message to the rest of the world that Ireland is serious about its cattle breeding.
- ICAR plays a very important role in providing guidelines and standards that underpin regulations in the EU and increasingly in other countries.
- Should have these review meetings after attending ICAR.

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