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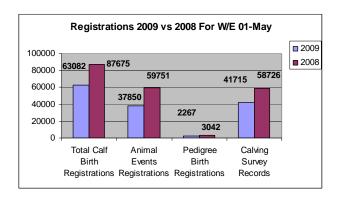
1. Important Dates

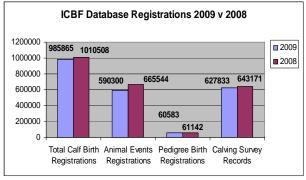
- Thursday 7th May 2009. 11:00 13:00 Sheep Board Meeting followed by meeting with owners of MALP flocks at Johnstown House Hotel, Enfield & Potterton's farm.
- Wednesday 20th May 2009. 10:30 15:00. Sheep Genetic Evaluation Consultation Meeting. Maldron Hotel Portlaoise.
- Tuesday 9th June. Irish Grasslands Assn Sheep Meeting. This meeting will feature recent developments by Sheep Ireland. Johnstown, Co. Kilkenny.

2. Workshop

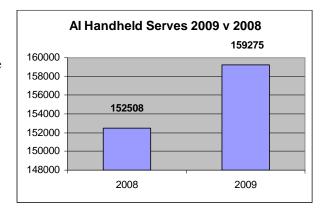
On Tuesday a Workshop jointly sponsored by TEAGASC, ICBF and UCD was held to explore ways of improving the efficiency and effectiveness of research building on the recent success with genomic selection. Attached is a summary of the outcome of the workshop. Copies of the presentations can be found on the ICBF website in the publications section.

Database





- ♣ The 2009 Suckler Scheme calving continue to flow in. In relation to 2008 born calves, the number of calves with a meal feeding introduction has increased to 777,000, with just over 685,000 of these having been weaned.
- The revamp of the Milk Recording system continues. Testing will continue for another couple of weeks before moving the system live for some users.
- ♣ The Fertility reports for this AI season will be released next week.
- ♣ Work on a new mechanism of sending and receiving Suckler scheme data to DAFF is continuing.



- Development on the sheep application continues, with on-going updates being released.
- The graph here shows Inseminations recoded on AI Handhelds in 2009 compared with 2008. There are more technicians using the handhelds in 2009 than there were in 2008.





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4. Tully

- Bloods are coming in at a steady rate with samples from 31 herds been received to date.
- ♣ NCBC recently purchased a Simmental bull sired by Curaheen Tyson (ET) that was the top performing bull in that breed in the last Tully intake and had average daily gain of 2.3 kg, feed conversion efficiency of 6.2 and scanned muscle and fat depth of 84.0 and 4.73, respectively. (See photo)
- Again power washing and disinfection of all sheds has continued this week in preparation for the next intake.



5. Genetic Evaluations

Genomic Update

We are still in the process of running the genomic selection software. This is taking longer than previously due to the increased time required for processing the extra genotypes. We hope to have proofs available early next week.

6. HerdPlus





The newly redesigned Fertility Report is going live this weekend. Feature of the new version is that it gives the farmer a lot more control. It is now run off the web directly by the farmer. He decides when and how often he runs it and he also dictates what the date parameters are, i.e. he can confirm his calving date and his mating start date before running. As you can see by the sample report (attached) we also have given it a new look. As well as calving Summary data we have also identified 4 Key Performance Indices (KPI's) for Fertility, comparing each herds numbers versus the top 15% performers in HerdPlus;

Fertility KPIs are;

- 21 day submission rate
- 42 day submission rate
- Cows calved > 30 days and not bred
- 6 week non return rate
- The last page(s) of the report is the "Action" list these are the cows that are not yet submitted for service that have calved greater than 30 days. These "problem" animals are listed in "days open" order. As we are more than 3 weeks into the breeding season for many farmers, we urge them to check their AI data is in and start running their fertility reports. As per usual HerdPlus clients log on to www.icbf.com to run their reports, after each run the report gets copied to the farmers web for reference. On line clients can run this weekly and as many times as they wish. For "paper" clients our HerdPlus office staff will provide a 3 week and 6 week basis in the post.

7. Lambplus®

- ➡ Tim Byrne from Abacus Bio has arrived back in Ireland to continue the Genetic Evaluation Index work.
- A full list of changes that are planned to be made to the Lambplus web screens is







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being compiled & will be circulated to ensure that everyones input is received when the changes are being made.

- The Donegal FRS Scanning team has completed their third & final training session, have been equipped when Handheld units & are now planning their visits. They will be assisted by a dedicated person from Lambplus to assist those Flockowners that require assistance in entering their lamb tag details etc.
- ♣ Another round of phone calls has been made to ensure that all lambs have been entered onto the system in advance of the scanning visit.
- Meetings are currently ongoing with the Flock Books to go through the Lambplus program and explore ways of linking up with the Flock Books.
- Five MALP flocks have been visited to-date with EID tags being inserted and weights taken on all available lambs.
- ♣ The keying of the Ewe NSIS tag numbers into the database is continuing.
- A genetic evaluation consultation meeting will be held on Wednesday 20th May at the Maldron Hotel from 10:30 to 15:00. This is an open meeting at which the research team will be presenting their initial findings on the breeding objective for Irish sheep. This is a very important meeting for the sheep breeding industry.

8. Milk Recording

	National Milk Recording Statistics - Herds, Cows & EDIY 01/05/09						
Milk Recording Organisation	Total Herds Recorded YTD 01/05/09	No. EDIY Herds YTD 01/05/09	% Herds EDIY	Total No. Cows Recorded YTD 01/05/09	No. EDIY Cows YTD 01/05/09	% Cows EDIY	
Progressive	1,798	633	35%	128,165	45,308	35%	
Dairygold	1,302	444	34%	83,327	29,350	35%	
Kerry	810	52	6%	46,625	2,682	6%	
SWS	810	93	11%	47,642	5,505	12%	
Tipperary	106	31	29%	7,479	2,618	35%	
Arrabawn	120	97	81%	7,844	6,429	82%	
Connacht	98	17	17%	5,322	883	17%	
Donegal	4	4	100%	372	372	100%	
Total	5,048	1,371	27%	326,776	93,147	29%	

Recorded Cows by Milk Recording Organisation - Year on Year Comparison							
Milk Recording Organisation	YTD 2008 Cows Recorded 01/01/08 - 01/05/08	YTD 2009 Cows Recorded 01/01/09 - 01/05/09	2009 vs 2008 Year on Year Difference (%)				
Progressive	131,672	128,165	-2.7%				
Dairygold	82,198	83,327	1.4%				
Kerry	52,834	46,625	-13.3%				
SWS	46,641	47,642	2.1%				
Tipperary	8,484	7,479	-13.4%				
Arrabawn	7,922	7,844	-1.0%				
Connacht	6,168	5,322	-15.9%				
Donegal	432	372	-16.1%				
Total	336,351	326,776	-2.9%				





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National Milk Recording Results by County - 10 day Period 21/04/09 to 01/05/09								
	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	14	894	64	25.8	3.69	3.47	1.85	234
CAVAN	29	1,472	51	25.5	3.80	3.31	1.81	205
CLARE	23	1,354	59	24.7	3.67	3.30	1.72	333
CORK STH	243	14,470	60	26.3	3.81	3.39	1.89	307
CORK NTH	252	16,470	65	27.1	3.78	3.40	1.95	285
DONEGAL	2	239	120	26.6	3.88	3.17	1.88	333
DUBLIN	5	311	62	26.7	3.41	3.44	1.83	292
GALWAY	16	847	53	27.2	3.79	3.35	1.94	339
KERRY	122	7,265	60	27.2	3.74	3.31	1.92	318
KILDARE	19	1,417	75	29.2	3.82	3.42	2.11	312
KILKENNY	68	4,176	61	26.1	3.74	3.42	1.87	188
LAOIS	39	2,533	65	24.9	4.04	3.45	1.87	202
LEITRIM	7	402	57	27.5	4.00	3.26	2.00	218
LIMERICK	111	7,018	63	27.2	3.67	3.31	1.90	309
LONGFORD	3	165	55	30.1	3.77	3.39	2.16	117
LOUTH	22	1,930	88	27.6	3.82	3.42	2.00	246
MAYO	20	907	45	27.1	3.58	3.39	1.89	291
MEATH	44	4,152	94	26.4	4.05	3.37	1.96	358
MONAGHAN	25	1,071	43	28.8	3.76	3.32	2.04	284
OFFALY	42	2,689	64	26.2	4.20	3.48	2.01	200
ROSCOMMON	2	60	30	27.0	3.79	3.24	1.90	567
SLIGO	14	730	52	21.1	4.02	3.32	1.55	450
TIPPERARY NTH	65	4,403	68	25.3	3.87	3.45	1.85	234
TIPPERARY STH	79	5,209	66	25.3	3.85	3.38	1.83	265
WATERFORD	55	4,515	82	25.3	4.11	3.44	1.91	244
WESTMEATH	23	1,730	75	23.3	3.91	3.32	1.68	270
WEXFORD	60	4,215	70	26.4	3.85	3.45	1.93	232
WICKLOW E	19	1,245	66	25.7	3.59	3.46	1.81	264
WICKLOW W	10	1,008	101	28.3	4.12	3.44	2.14	277
	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	1,433	92,897	66	26.4	3.83	3.37	1.90	282





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Natio	National Milk Recording Averages by Province - 10 day Period 21/04/09 to 01/05/09									
Provincial	No. Herds Recorded Recorded Size Average Size Average Recorded Size Average Recorded Size Average Recorded Size Average Recorded Size Average Average Average F + P kg SCC									
Munster	950	60,704	64	26.1	3.89	3.37	1.89	287		
Leinster	368	26,465	72	26.7	3.83	3.43	1.93	246		
Connacht	59	2,946	50	26.0	3.75	3.31	1.83	373		
Ulster	56	2,782	50	27.0	3.98	3.27	1.95	274		

9. Change in our phone numbers

The ICBF phone numbers have changed. Our new numbers have "88" added to them after the area code (023). Please amend your files as soon as possible. The old numbers will continue to work until May of 2009.

Old Number (example)	New Number (example)
Phone: 023 20222	023 88 20222
Fax: 023 20229	023 88 20229

Brian Wickham Ph.D. Chief Executive Irish Cattle Breeding Federation Soc. Ltd, Highfield House, Shinagh, Bandon, Co. Cork, Ireland, Phone office +353 (0)23 882 0222, mobile +353 (0)86 826 9911 Fax office +353 (0)23 882 0229 E-Mail bww.ichf.com ICBF Web site www.icbf.com ICBF Web site www.icbf.com



Building an Integrative Research Framework to Deliver Profit, through Breeding, to the Agri-Food Industry – <u>Summary of Meeting.</u>

Background.

ICBF, Teagasc & UCD co-hosted a meeting entitled "Building an Integrative Research Framework to Deliver Profit, through Breeding, to the Agri-Food Industry". The meeting took place in the Heritage Hotel, Portlaiose on Tuesday 28th April 2009. A total of 67 people attended the meeting, from a cross section of the Irish Agri-Food industry (with particular interest in Animal Breeding & Genetics). A breakdown of those attending the meeting based on particular industry segment is given in Table 1.

Table 1. A breakdown of those attending the meeting based on industry segment.

Industry Segment	People Attending
Department of Agriculture & Food	7
Irish Cattle Breeding Federation (includes staff & representatives from industry shareholders)	13
Teagasc (includes staff from research & extension centres)	29
Universities (includes staff from University College Dublin & Trinity College Dublin).	9
Wider Industry (includes staff from Animal Health Ireland, Bord Bia, IBEC, Identigen Ltd, Irish Farmers Journal & Weatherby's Ltd)	9

A list of those attending, including the agenda for the meeting is given in the attached Appendix. Copies of the presentations can be found in the publications section of the ICBF website (www.icbf.com).

Program Objectives.

The objective of the meeting was to promote greater integration within Animal Breeding Research & Development, with a view to improving the profitability of the Irish Agri-Food industry.

To help facilitate discussion, a break-out session was included in the program and a number of key questions posed to those attending. The 67 people were sub-divided to 6 groups and a facilitator appointed to each group. The key questions and "pooled" answers from the break-out sessions are given in Table 2.

Table 2. Summary of key questions & feedback from the Industry Meeting.

Question.	Key Answers.
Question 1. Why should we build an integrative	• To increase the profitability and sustainability of this important indigenous industry.
research framework for delivering profit through breeding to the Irish	• To increase our International competitiveness in terms of Agri- Food export.
Agri-Food Industry?	To increase our National and International competitiveness for research funding.

	To avoid duplication of effort/costs across research centres.
	• To ensure better value from existing resources. Interaction will generate new ideas and related synergies (people & laboratories).
	• To ensure a better collective focus for our research effort.
Question 2. How should we build this integrative	• The program must have clear objectives that are industry focused.
research framework? Suggest ideas/models for building the required	• We need to establish a consortium of key stakeholders that will direct the program.
framework?	• The consortium should develop a National strategy document to define objectives and deliverables.
	• Within this consortium, we need to identify people within each participating group (champions) that will help deliver the program objectives on behalf of the consortium.
	• Consortium should have wider focus than just breeding (e.g., role of nutrition, physiology & health).
	• DAFF have an important role in the initiative, through provision of support structures (e.g., funding & facilities).
	• There needs to be clear communication with all stakeholders through regular work-shop meetings, website updates etc.
	• There needs to be an acknowledgement amongst stakeholders that the competition is outside of Ireland (e.g., NZ & South America) as opposed to within Ireland (i.e., between research groups)
	• The consortium should consider joint appointments/secondments across participating groups.
	• A current resource audit should be undertaken to establish the extent of available resources across participating stake-holders.
	• Co-operation within the initiative cannot be forced. Instead we must build a frame-work that is attractive for all participants to work within.
Question 3. How will we	General measures of Success.
measure our short, medium & long-term success?	• Industry uptake and profitability (including phenotypic and genetic trends).
	• Critical mass (knowledge & IP) within the research group and wider industry.
	Specific - Short-term (1-2 years)
	• Clear action from today. We must look to start immediately. Set up the group, define the objectives & establish key

deliverables.

- Establish some measures of short-term success;
 - % of new projects from the collaborative group,
 - Number of peer reviewed journals (from the group)
 - Number of high calibre PhD students (within the group).
 - Initial industry uptake to new measures/approaches.

Specific - Medium-term (3-5 years).

- The building of knowledge & IP at research level.
- The quality of people being attracted to the initiative & the quality of people being retained within the initiative.
- The ability for the initiative to attract outside/industry funding.
- The number of technology companies "spinning out" from the initiative.

Specific - Long-term (6+ years).

- Econometric trends; profitability, genetic & phenotypic trends.
- Impact on international competitiveness.
- Ability to leverage international funding.
- The building of knowledge & IP at wider industry level.
- Critical mass within the industry

Question 4. Based on the 3 talks presented (from ICBF, Teagasc & UCD), how complete is the desired framework for fertility traits? Are there improvements to the working model? Can you identify some specific actions out of today?

- We don't currently have an integrated framework for fertility.
- Need more work linking genomics (genetic evaluations for fertility) & underlying genes for fertility (through genome wide association studies).
- There should be a more integrated approach across genetics, physiology & breeding. For example, in the future, research models should use information from animals that have all 3 pieces of information.
- Need better communication & interaction on how to record fertility phenotypes (which traits, recorded when & where?).
- We need to have a periodic user forum to provide input into research program (commodity groups). For example, new fertility research should concentrate on 2 areas; (i) Exploiting 'omic technologies, and (ii) Increasing AI usage.
- We should consider industry incentives to promote "best practice in breeding" (e.g., the success of the Suckler Cow Welfare Scheme in beef cattle).
- We need to improve transfer technology at farm level.

Key Outcomes from the Meeting.

Based on excellent feed-back and discussion, particularly from the working groups, a number of key outcomes were identified from the day. These included;

- The Irish-Agri Food industry is well positioned to deliver on the potential of new 'omic technologies in animal breeding. This is due primarily to 2 key reasons;
 - o *Critical mass of people and resources;* Teagasc, the universities and ICBF have and are continuing to develop the key people and the resources required for effective delivery of the new 'omic technologies. (i.e., more accurate phenotypes, genetic/genomic evaluations, genotyping capabilities, specific gene effects/genome wide association studies & breeding programs).
 - An infrastructure for delivery. As a result of the establishment of ICBF & the new Animal Health Ireland, the Irish Agri-Food Industry is now much better structured to;
 (i) identify the priorities and (ii) deliver the benefits of improved research and development in animal breeding (& related disciplines), to the industry.
- The "Genomics Story" is an excellent template of how key industry groups (Teagasc, ICBF and Universities) can come together to deliver real benefits to the Agri-Food industry (€0.5 million spent to return €8 million/annum gains).
- A consortium of key stakeholders should be put in place to establish a "new frame-work" for animal breeding research, involving ICBF (& the wider industry), Teagasc and Universities. The consortium should then look to develop a National strategy document, identifying key objectives and deliverables for the new program. The scope of this work could extend beyond animal breeding to consider all aspects of animal science.
- Measures of success should be identified that are focused on; (i) industry uptake and profitability and (ii) critical mass (knowledge & IP) at research & industry level.
- On the specifics of fertility, a working group should be put in place from the industry stakeholders, to evaluate current and future opportunities for more integrated research in the area of fertility. Identifying the underlying chromosomal regions influencing fertility should be a priority of that working group.

Andrew Cromie, ICBF Donagh Berry, TEAGASC Alan Fahy, UCD

30th April 2009



Weekly Fertility Report Spring 2009

LoCall 1850 600 900

Herd Owner: SAMPLE
Herd Number: IE1234567

Mating Start Date (MSD): 01/04/2009 Report Date: 01/05/2009
Cows Heifers

(a). Calving Summary Data - Report is based on dairy cows that calved from 07/01/2009

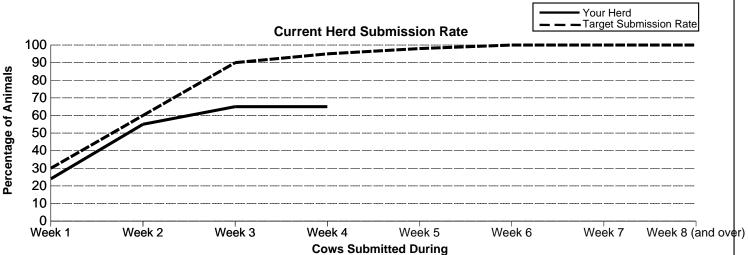
	Spring Dairy Calving Dates					
	Start Calving	Median Calving ¹				
Cows	07/01/2009	02/02/2009 (26 day				
Heifers	24/01/2009	14/02/2009	(21 days)			
Herd	07/01/2009	13/02/2009	(37 days)			
Total	Dairy Calvings	95				
Total Dai	iry Calves Born	78				
F la a 4	omi Notos					

Spring Dairy Calving Pattern							
	Num. Cal	ved (%)	Top 15% ²				
Week 3	34	(36%)	45%				
Week 6	72	(76%)	79%				
Week 9	78	(82%)	91%				

Explanatory Notes

¹ **Median Calving:** Date on which 50% of cows/heifers have calved as a percentage of cows/heifers calved on report date.

(b). Current Herd Submission Rate - Report is based on dairy cows that calved from 07/01/2009



(c). Key Performance Indicators (KPI's)			Cows		Maiden Heifers	
Days since Mating Start Date:	31		Your Herd	Top 15%	Your Herd	Top 15%
1. 21-day Submission rate Cows/heifers submitted for mating within 21 da as a percentage calved up to 21 days after MSI	•	Heifers	65%	76%		95%
42-day Submission rate Cows/heifers submitted for mating within 42 day as a percentage calved up to 42 days after MSI		89%		100%		
3. Cows calved >30 days and not bred % of cows calved greater than 30 days at MSD (71) and not yet submitted within 21 days of MSD (21)			30%	14%		
4. 6 Week Non-Return rate Cows/heifers with more than one serve as a percentage of cows/heifers served in the 1st 6 weeks				40% *		30% *

This is a target figure as many farmers do not record stock bull serves, therefore the top 15% would not be accurate.

² Top 15%: This figure relates to the National Top 15% of Spring Calving Dairy Herds.