



*Best Wishes for Christmas and the New Year
from all at ICBF & Sheep Ireland*

1. Important Dates

- ✚ **ICBF Board Meeting** – Thursday 21st January 2010, **10:00 to 14:00** – Portlaoise.
- ✚ **Sheep Ireland Board Meeting** – Thursday 21st January 2010, **14:00 to 16:30** – Portlaoise.

2. A review of 2009 – *Brian Wickham*

As 2009 draws to a close it is a good opportunity to reflect back on the year that was, for ICBF and Sheep Ireland.

2009 has been a very challenging year for Ireland, for Irish farmers and for the cattle and sheep breeding industries. It is in these recessionary time that hard decisions must be made in order to ensure the future viability of our organisations and industry. The decisions taken by ICBF over its short history and the efforts of our dedicated and hard working team have placed us in relatively good position as 2009 comes to a close.

The major achievement of 2009 has been the roll-out of genomic selection for dairy cattle. In a period of less than twelve months the required research was completed, ICBF's genetic evaluation systems modified, the results communicated to dairy farmers and the AI industry providing genomically selected bulls. In the spring 2009 35% of 460,000 recorded dairy inseminations were from genomically selected bulls. This was a major contributor to the increase in the average EBI of sires used from €106 in 2008 to €144 in 2009 an increase of €38. This €38 EBI increase is predicted to result in a €15 million improvement in the profitability, over their lifetime, of the resulting dairy replacements.

That Ireland was able to lead Europe in the exploitation of the new genomic technology is a consequence of a number of key factors including:

- Establishing, over a number of years, a team of highly skilled and well motivated experts in ICBF and Teagasc.
- Partnerships with international collaborators that provided access to knowledge, technology and research material.
- The creation of a bank of DNA samples from the bulls used in AI in Ireland.
- The provision of funding, through Teagasc, to genotype the training population of proven AI bulls.
- Access to the ICBF database and genetic evaluation system, firstly to support the research and, secondly to implement the findings.
- Dairy farmers who are convinced of the merits of the EBI and use it as the main basis for selecting AI sires.
- A forward looking breeding industry that responds quickly to the availability of new technology to help them better meet the needs of Irish farmers.

At this time last year we were celebrating the achievements of the first year of the **Suckler Cow Welfare Scheme**. As a result of the demonstrable benefits of the scheme DAFF have committed the resources needed for it to continue in 2010. This is a major achievement in light of the severe constraints on public finances.

Achievements in 2009 relevant to the scheme include:

- A continued very high level of participation by suckler herds in the scheme representing more than 90% of all suckler cows.
- A streamlining of the scheme based on experience in 2008 resulting in costs savings and simplification of recording.
- The incorporation of data from the scheme in genetic evaluations for calving (ease, mortality & gestation length), calf quality and docility. In 2009 the extra records incorporated in genetic evaluations were some 200,000 docility, 300,000 calf quality and 500,000 calving records.
- DAFF provided ICBF with anonymous location data over a number of years for some 2.5 million animals prior to slaughter. As a result the accuracy of genetic evaluations based on slaughter data improved substantially.
- A considerable amount of backdata was obtained for herds participating in the scheme. This data included the identification of sires for suckler cows and as a result some 40,000 additional maternal records were incorporated in our evaluations for maternal traits.
- The Euro-Star indexes are now widely accepted by the beef breeding industry.

This scheme has been so successful, so quickly, because of a number of factors including farmers' awareness of the value it represents, and the ability of DAFF and ICBF to put in place the required systems and infrastructure. There is also very good industry buy-in with the Farmers Journal playing a key role in removing the mystique from the scheme. This is the second year of the planned five years. Even at this stage Ireland is starting to lead the world in beef cattle breeding while also achieving the high welfare standards in beef production.

The *Best Practise in Cattle Breeding* campaign was launched this year. It played a key role in the high level of uptake of genomically selected bulls to breed dairy replacements. This year's campaign featured weekly installments, 16 in the spring and 6 in the autumn, of cattle breeding information on a dedicated page in the Farmers Journal.

The GEN€IR€LAND[®] dairy progeny test program for spring 2009 involved two major changes – the removal of incentive payments for providing data and the availability of genomic information for the bulls being tested. While this presented a number of challenges the required herds were recruited for both the spring and autumn campaigns. Proof that GEN€IR€LAND[®] is working the way it was designed to was shown in the results for the 2005 and 2006 schemes lining up perfectly with our predictions. Likewise the beef program continues to grow with 18 bulls fully tested in 2009 and a number of new graduates from the first year of the program (Spring 2007) now entering the ICBF Active Beef Bull List.

This year's Dairy Cattle Breeding Conference (December 10th, 2009) was a forum for users of ICBF services to learn of the latest development in genetic evaluations, GEN€IR€LAND[®] and HerdPlus[®]. It gave us all an opportunity to recognise the key practices required for successful cattle breeding; accurate record keeping, consistent use of AI and the use of genetic evaluations in making breeding decisions. Sponsorship from the FBD Trust enabled the awarding of fifteen prizes to breeders and herd owners who excelled. In the afternoon the results of the EBI Discussion Group competition were announced. The competition continues to grow and the results being achieved by Discussion Groups demonstrate that the major benefit of the competition is in the form of improvements in farm profitability as a result of following best practise. Teagasc, the Irish Farmers Journal and ACC Bank are our partners in this event.

The Tully and GEN€IR€LAND[®] beef open day (10th October 2009), was a huge success with some 500 farmers attending. The objective of the day was to inform beef farmers on latest developments in beef breeding including Euro-Stars, Tully intakes, Animal Health, GEN€IR€LAND[®] and ICBF HerdPlus. In addition, bulls

from the last Tully intake were also available for purchase on the day (by private treaty), resulting in an excellent and informative day for all attendees.

ICBF's cattle breeding database is now increasingly available to herd owners. Major upgrades to infrastructure in 2009 have resulted in increased speed of access to the database for all users. HerdPlus[®] usage is approaching 6,500 dairy and beef herds (4,700 this time last year), with some 75% choosing the electronic option. These herds have direct access via ICBF's website (www.icbf.com) to not only record a wide range of events but also, a wide array of valuable management information. ICBF's AI handheld system was used to record over 0.56 million inseminations in 2009. Our bull search facility (on www.icbf.com) which had a complete revamp in 2008 is one of the facilities on our website that farmers and breeders find most useful.

Several of the beef Breed Associations have provided, through their websites, on-line access to their Herd Books. This facility, provided by ICBF, involves live access to the ICBF database, providing a very powerful tool to beef breeders, for locating the best pedigree animals in Ireland. It is complemented by ICBF's GROW[®] service.

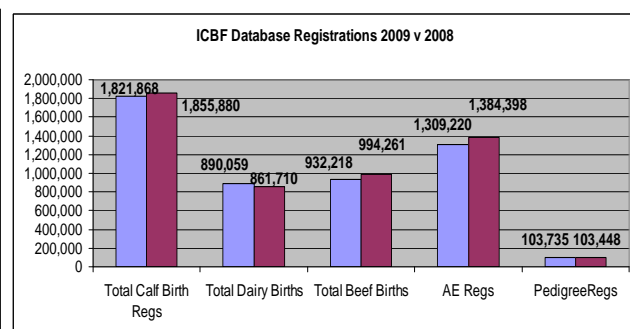
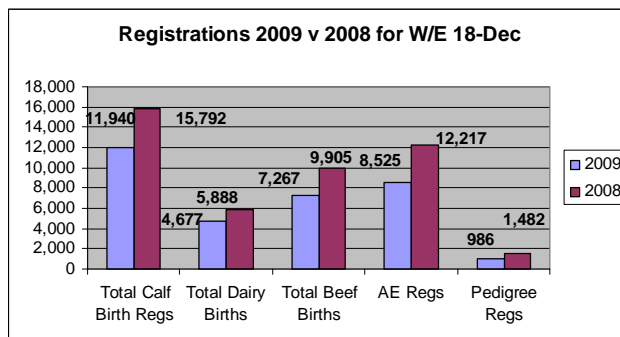
This year the extension of ICBF's infrastructure to sheep made substantial progress. Sheep Ireland (www.sheep.ie), with its own Board, has proceeded to implement the strategy agreed in 2008 for improving the sheep meat supply chain, and thus the profitability of sheep farming. All key elements: database, MALP, CPT and genetic evaluations are now in place. We are now ready to grow our LambPlus[®] service. By extending ICBF to cover sheep there are benefits for cattle, through spreading of overheads, and for sheep, through ready access to knowledge, skills and infrastructure.

Irish farming benefits greatly from the unique partnership that exists between Government and the industry. The ability of ICBF to put DAFF funding to good use is widely acknowledged and in 2009 was particularly evident through the Suckler Cow Welfare Scheme, G-EN-€IR-€LAND[®] and Sheep Ireland. Without DAFF support it would be much more difficult for ICBF to deliver so much benefit to the industry and wider community.

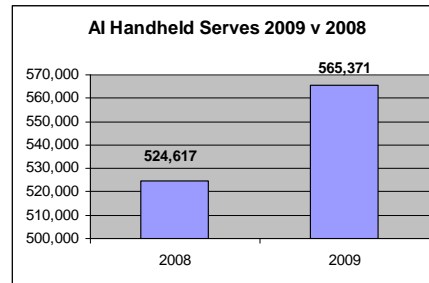
On reflection, 2009 has been a year highlighted by the exploitation of new technology for the benefit of Irish farmers. We have been able to achieve growth in most of our activities. The economic pressure on dairy farmers has reversed some of the previous growth in milk recording. We have been able to achieve this extra output with little increase in staffing and ICBF's financial situation is in line with budgets. The key to ICBF's success has been the application of good science, a focus on the needs of farmers and a commitment to continuous improvement 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, our sponsors and DAFF.

On behalf of the ICBF team I would like to take this opportunity to extend seasons greetings to all of our readers.

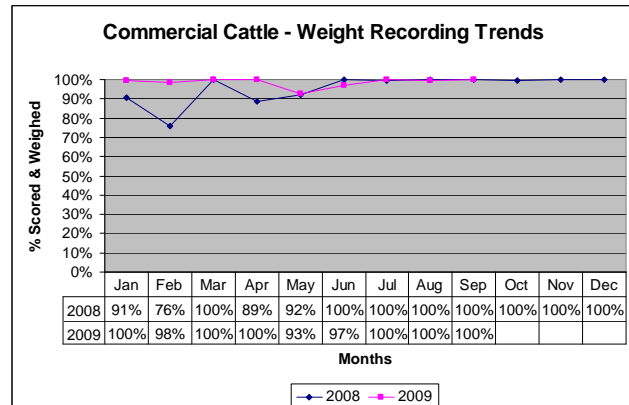
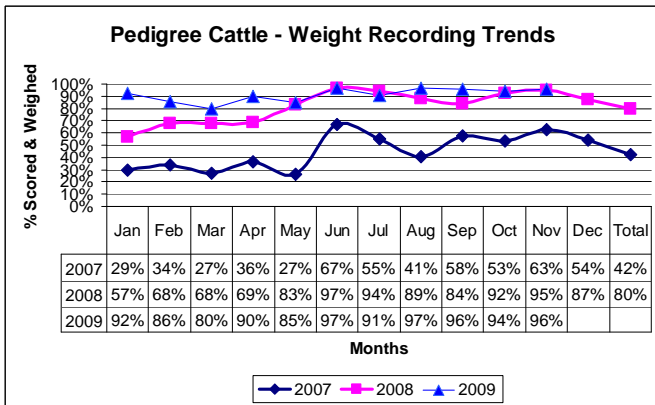
3. Database



- ✚ In the Suckler scheme, the number of 2009 born calves with meal introduced is 546,000, with the number of animals weaned at 405,000.
- ✚ This week, the final part of the infrastructure upgrade was completed. The connectivity between the main database and the outside world is now by means of a 10MB broadband line. This is a significant increase on the previous line capacity. We continue to work on tidying up any loose ends, and working with the various organisations to help smooth the transition.
- ✚ All four milk recording organisations are working well on the new Milk Recording system. We are continuing to update the software based on feedback from the organisations.
- ✚ There a number of project currently being finalised. The AI Code application is now in test mode, and the final changes are being made to the Sheep application for Sheep Ireland.
- ✚ A number of changes to facilitate the migration to the new Beef Linear evaluations from Jan 1st are being finalised.
- ✚ The graph shows Inseminations recoded on AI Handhelds in 2009 compared with 2008.



4. GROW[®] – Linear Scoring & Weight Recording



November Figures

- ✚ The figures for November are ahead of the figures for the same time last year.
- ✚ It is the 6th month in a row that the weighing % for pedigree animals has been over the 90% mark.
- ✚ The weight recording % for Pedigree animals has not fallen below 80% in 2009.
- ✚ The weight recording % for Commercial animals has not gone below 93% for any month this year.
- ✚ 100% of Commercial weanlings were scored & weighed in November.
- ✚ To-date in 2009, 5,615 Commercial & 7,114 Pedigree weanlings have been scored & weighed individually.
- ✚ Combined that represents a total of 12,729 Beef Weanlings that were individually weight recorded and linear scored in 2009.

- ✚ One of the main aims of the GROW service since its launch in January 2008 has been to improve the quality of the data recorded.

Pedigree - Total Scored & Weighed Statistics (1 st Jan - 1 st Dec)			
Year	Total	Scored Only	Scored & Weighed
2007	10530	6186	4344
2008	11162	2303	8859
2009	7763	649	7114

Commercial - Total Scored & Weighed Statistics (1 st Jan - 1 st Dec)			
Year	Total	Scored Only	Scored & Weighed
2007	3301	144	3157
2008	4406	47	4539
2009	5655	40	5615

New GROW[®] Report

- ✚ The new GROW[®] report is awaiting final development work to be completed on it.
- ✚ It will then be sent out to all breeders following a visit from a Scorer.
- ✚ Crucially, it will show a Breeder how many of the animals that they put forward for scoring & weighing will have their own data included in their evaluations. This will depend on:
 - Weight Record
 - Age – 150-300 days is desired age window
 - Group size – Group of 5 is minimum required group size.
- ✚ A constant issue following a Scoring session is that a Breeder assumes that all data recorded is subsequently used in genetic evaluations. This is not always the case, however up to now this has not been clearly communicated to Breeders. The new GROW[®] report will address this issue.
- ✚ This report will also be available on the web. Attached is an example of what the front page of the report will look like (Section 2 is blank in this example):

5. Sheep Ireland

- ✚ The first of the early born pedigree Lambs have been entered into the LambPlus[®] system by Breeders.
- ✚ The current web screens are still operational while the development work on the new screens is being finalised.
- ✚ Testing of the new LambPlus[®] recording screens is nearly completed.
- ✚ The Development & Testing work will result in improvements in the following LambPlus[®] Screens:
 - Inventory
 - Lambing
 - Mating
 - Rearing Status
 - Weighing

- Great progress has been made in Sheep Breeding in Ireland in 2009. The main focus of Sheep Ireland this year was the establishment of the systems required to deliver a Sheep Breeding Program for Ireland. The 3 main systems that were required to be put in place were:

1. Data Capture & Information System – Lambplus®
2. Commercial Demonstration Flocks – MALP (Maternal Lamb Producer Group)
3. Central Progeny Test (CPT)

- These systems were put in place during 2009. The focus for 2010 will be:

LambPlus:

- Increase in number of Flockowners participating in LambPlus®.
- Delivery of ‘Lambing Report’.
- Inclusion of full ancestry data in genetic evaluations.
- Increased promotion of Euro-Star system to Commercial Flockowners at Ram Sales.

MALP:

- Release of first Genetic Evaluation results for Rams with progeny in 2009 program.
- Ensure that as much carcass data as possible is retrieved from Factories.
- Introduction of Handheld Data Capture unit to MALP Flockowners.
- Ensure that as many breeds as possible have progeny across the MALP flocks.

CPT:

- Commence data recording schedule across CPT flocks.
- Increase the number of Rams from ‘well related’ bloodlines that are acquired for the CPT.
- Elevate the status of the semen collection unit at Lyons so as it is licensed to export semen.
- Investigate further CPT Research possibilities at Lyons.

- The work that was completed during the year would not have happened without the cooperation & support of many people – too many to mention.
- Sheep Ireland would like to thank everybody that helped get the project off the ground in 2009 and we look forward to working with you all again next year & into the future.
- Everyone at Sheep Ireland would like to wish you all a very Merry Christmas & a Great New Year.

Members of the Strangford Down Lamb Producer Group with some of the Sheep Ireland team during their visit to Andrew Moloney’s farm earlier this month.



6. Milk Recording

National Milk Recording Results by County - 10 day Period 08/12/09 to 18/12/09.

	<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>
CARLOW	6	348	58	23.3	4.64	3.52	1.90	484
CAVAN	21	750	36	19.2	3.96	3.44	1.42	401
CLARE	6	278	46	25.4	3.65	3.39	1.79	258
CORK STH	201	9,715	48	18.1	4.23	3.47	1.39	409
CORK NTH	109	5,463	50	17.8	4.35	3.57	1.41	374
DONEGAL	7	489	70	11.5	4.88	3.79	1.00	355
DUBLIN	7	365	52	26.3	3.94	3.39	1.93	694
GALWAY	20	1,034	52	17.0	4.31	3.44	1.32	409
KERRY	46	2,581	56	16.4	4.05	3.37	1.22	404
KILDARE	21	1,301	62	21.8	4.14	3.48	1.66	349
KILKENNY	8	716	90	18.8	4.20	3.57	1.46	407
LAOIS	30	1,680	56	17.4	4.23	3.58	1.36	473
LEITRIM	3	100	33	19.0	3.79	3.51	1.39	265
LIMERICK	40	1,962	49	15.2	4.07	3.41	1.14	421
LONGFORD	3	100	33	13.2	4.07	3.34	0.98	471
LOUTH	15	1,292	86	26.0	4.09	3.44	1.96	658
MAYO	27	1,275	47	18.5	4.05	3.59	1.41	489
MEATH	45	3,216	71	21.6	3.99	3.44	1.60	444
MONAGHAN	32	1,324	41	19.8	4.07	3.42	1.48	418
OFFALY	11	516	47	17.6	4.20	3.55	1.36	285
ROSCOMMON							0.00	
SLIGO	4	209	52	17.4	3.85	3.40	1.26	508
TIPPERARY NTH	7	298	43	16.3	4.02	3.52	1.23	407
TIPPERARY STH	4	245	61	19.2	4.42	3.60	1.54	250
WATERFORD	22	1,413	64	22.3	4.31	3.52	1.75	378
WESTMEATH	14	804	57	19.1	4.37	3.48	1.50	423
WEXFORD	42	2,326	55	20.1	4.10	3.46	1.52	365
WICKLOW E	15	883	59	17.4	3.91	3.41	1.27	403
WICKLOW W	7	664	95	25.1	4.53	3.41	1.99	560
	<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	773	41,347	56	19.3	4.16	3.48	1.48	420

National Milk Recording Averages by Province - 10 day Period 08/12/09 to 18/12/09.

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	435	21,955	50	18.8	4.19	3.48	1.45	363
Leinster	224	14,211	63	20.6	4.06	3.47	1.55	463
Connacht	54	2,618	48	18.0	4.03	3.49	1.35	418
Ulster	60	2,563	43	16.8	4.28	3.55	1.32	391

National Milk Recording Statistics - Herds, Cows & EDIY 18/12/09

Milk Recording Organisation	Total Herds Recorded YTD 18/12/09	No. EDIY Herds YTD 18/12/09	% Herds EDIY	Total No. Cows Recorded YTD 18/12/09	No. EDIY Cows YTD 18/12/09	% Cows EDIY
Progressive	2,087	852	41%	182,520	73,595	40%
Dairygold	1,508	567	38%	118,046	46,272	39%
Kerry	891	66	7%	64,017	4,253	7%
SWS	857	114	13%	62,491	8,945	14%
Tipperary	136	56	41%	11,357	5,013	44%
Arrabawn	141	116	82%	11,934	10,132	85%
Connacht	144	53	37%	9,891	3,594	36%
Donegal	34	34	100%	4,038	4,038	100%
Total	5,798	1,858	32%	464,294	155,842	34%

Recorded Cows by Milk Recording Organisation - Year on Year Comparison

Milk Recording Organisation	YTD 2008 Cows Recorded 01/01/08 - 18/12/08	YTD 2009 Cows Recorded 01/01/09 - 18/12/09	2009 vs 2008 Year on Year Difference (%)
Progressive	187,477	182,520	-2.7%
Dairygold	127,369	118,046	-7.9%
Kerry	79,850	64,017	-24.7%
SWS	63,277	62,491	-1.3%
Tipperary	13,147	11,357	-15.8%
Arrabawn	12,976	11,934	-8.7%
Connacht	10,719	9,891	-8.4%
Donegal	4,820	4,038	-19.4%
Total	499,635	464,294	-7.6%

7. Genetic Evaluations

Beef

Work is nearing completion on the development of the new sales catalogue incorporating information from the new beef linear evaluation. Extracts are currently ongoing for the next routine run (to be published in the 1st of February).

Dairy

Work continues on testing the new fertility evaluation. There are 4 areas requiring testing to investigate changes in proofs:

- 1) Impact of new genetic evaluation software (movement from PEST to MIX99)
- 2) Impact of using the new genetic parameters
- 3) Impact on the additional data from relaxing the calving interval restriction from 600 to 800 days where an insemination record is available
- 4) Impact of including fertility data from cows with no milk records

Good progress is being made to quantify the effects of each of the points above. A file of test proofs should be available around the 3rd week in January for distribution to the industry.

Extracts are currently ongoing for the next routine run (to be published in the 1st of February)

8. Tully

The first set of blood results taken last week came back clear for IBR, on all bulls. A further blood sample on all bulls (again testing for IBR) was obtained this week, which is the second of 3 blood samples taken weekly, during the 30 day isolation period.

All bulls, both in on-farm and off farm isolation were treated this week for lice, mange, immature and mature fluke, stomach and lung worms. Also, supplementary minerals were given to bulls as deemed necessary.

All outside pens were bedded with fresh woodchip, this week, which is allowing bulls to get adequate exercise. All bulls are currently being offered 8 kilos of concentrate and 2 kilos dry matter of hay, per head, per day. This has resulted in a small number of bulls reaching ad-lib feeding.

Work installing new drinkers for Shed 3 in Tully is near completion. This shed will facilitate the bulls from off-farm isolation (23 in total), once the blood testing has been completed and test results are favourable.

We would like to thank everybody for their contribution during the year and we look forward to another very productive year in 2010. We will close on Wednesday 23rd December for Christmas and return on Monday 4th January 2010.

*Wishing you all the Best
for Christmas and the coming Year.*

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Registered Dublin, Ireland. Registration Number 465004, Companies Acts 1963 to 2006. Web: www.sheep.ie



WEANLING PERFORMANCE REPORT

Pedigree 'Breed' Weanlings

Herd Owner: Mr John Spec	Designator: IE2113715	Date Created: 07-Sep-2007
1. Summary Statistics		
Date of Visit	02-Sep-07	Total
Total Number of Weanlings Presented	30	
Number of Weanlings <u>Eligible</u> for Evaluations (BLUPs & Euro - Stars)	14	
Number of Weanlings <u>Not Eligible</u> for Evaluations (BLUPs & Euro-Stars)	16	
Number of Weanlings - Sick/Injured	-	
Total Number of Weanlings eligible for Weighing & Scoring on date of visit	40	
		% of Records contributing to BLUP's & Euro-Stars
		47%
For a Weanling to be <u>Eligible</u> for Genetic Evaluations it must be: <div style="display: inline-block; width: 100px; height: 100px; background: black; transform: rotate(45deg); margin: 10px;"></div>		1. WEIGHED & SCORED
		2. 150 - 300 DAYS OLD (On day of visit)
		3. IN A GROUP OF 5 ANIMALS (Pedigree Weanlings from other Breeds & Commercial Weanlings allowed)
THE ABOVE RULES ARE NECESSARY SO AS TO ENSURE YOU RECEIVE ACCURATE BLUP & EURO - STAR FIGURES		

	2. Overall Herd Performance (Weanlings Eligible for Evaluations only)						
	Number of Records	Weight Gain			Conformation		Docility
	Weight (Kg)	Age (days)	Gain* (Kg/day)	Loin Dev (1-15)	Dev HQ (1-15)	1=Wild 10=Quiet	
i. Overall Herd Performance - Age							
All Calves							
150 - 200 days old							
200 - 250 days old							
250 - 300 days old							
ii. Overall Herd Performance - Sex							
Males							
Females							
iii. Overall Herd Performance - ET Calves							
Males							
Females							
iv. Overall Herd Performance - Dam Age							
1st Calvers							
2nd & 3rd Calvers							
4th+ Calvers							
v. Overall Herd Performance - Sire ID (5 most used Sires)							
IE241615240029							
IE211355230448							
IE211371590415							
IE301476030040							
IE211371590737							

*Average birth weight of 40kgs assumed for all calves.

3. Comparative Herd Performance (Weanlings Eligible for Evaluations only)						
		Btm 20%		Average		Top 20%
i. Weaning Weight (kg)	Herd Average	270				
Average weight (kg) at target weaning age (150-300 days)	National Average	264	210			300
	E.T Calves Average	280				
ii. Weight Gain (ADG)*	Herd Average	1.0				
Average weight gain (kg/day) from birth to weaning	National Average	0.8	0.65			1.2
	E.T Calves Average	1.2				
iii. Loin Development	Herd Average	10.0				
Average Score for Loin Development (1-15 Scale)	National Average	8.5	7.8			11.1
	E.T Calves Average	11.0				
iv. Hindquarter Development	Herd Average	10.0				
Average Score for Hindquarter Development (1-15 Scale)	National Average	8.1	7.5			10.1
	E.T Calves Average	11.0				
v. Docility	Herd Average	9.0				
Average Score for Docility (1-10 Scale)	National Average	8.0	6			9.2
	E.T Calves Average	11.0				