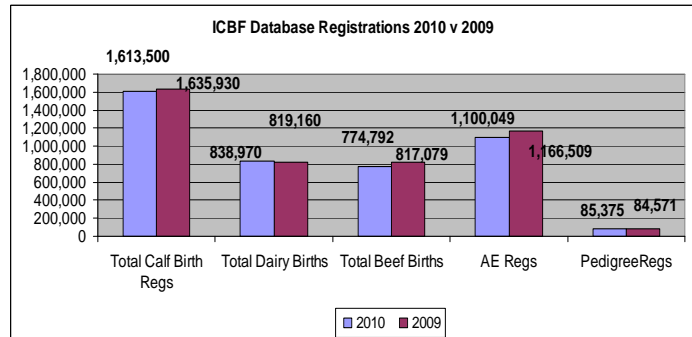
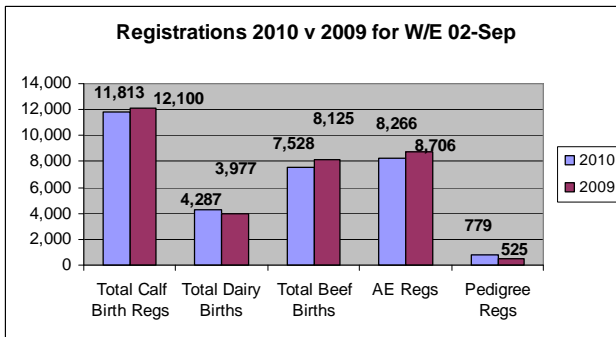


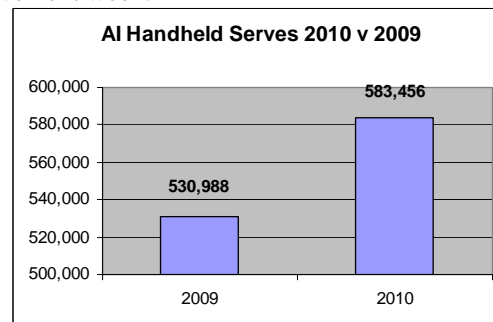
1. Important Dates

- ✚ **ICBF Board Meeting** – Thursday 16th September, 10:30 to 14:00 – Highfield House, Bandon.
- ✚ **Sheep Ireland Board Meeting** – Thursday 16th September, 14:00 to 16:30 – Highfield House, Bandon.
- ✚ **Tully Bull High Health Status Sale** Friday 8th October, ICBF Tully Central Performance Test Centre.

2. Database



- ✚ The stats above are compiled with the assistance of DAFF AIM systems.
- ✚ In the Suckler scheme, the number of 2010 born calves with meal introduced is 195,566 with the number of animals weaned at 17,117.
- ✚ Work is continuing on the design of the new catalogue service for both beef and dairy animals.
- ✚ Vets wishing to begin interacting with the AHI/ICBF system can register at <http://www.animalhealthireland.ie/registerpage.php>.
- ✚ The Dairy Replacements discussion group report will be live next week.
- ✚ The Beef Calving reports are currently being finalised and will be available early next week.
- ✚ Work is ongoing on the window server infrastructure, involving a move to a more resilient infrastructure for email, file servers, etc.
- ✚ Work on a new infrastructure for communicating with marts is on-going, with a view to getting the data flows on a more efficient and effective basis.
- ✚ The graph shows Inseminations recorded on AI Handhelds in 2010 compared with 2009.



3. Current Developments

Over the last few weeks we have been involved in a number of consultations and discussions of strategic importance to the future profitability of cattle and sheep farming in Ireland. These include:

- ✚ The provision of a genetic evaluation and parentage testing service based on the 3k (or 50k) SNP chip in association with IHFA and potential suppliers of genotyping services. These discussions are on-going.
- ✚ Progress with the establishment of IGenoP (see the publications section of www.icbf.com for background to this project). The current focus is on designing an appropriate information system to support the concept.

The design will be discussed with a number of international experts before being presented to potential international collaborators later in September.

- ✚ The establishment of a very high EBI herd (a “next generation” herd) for use in strategic Teagasc research aimed at ensuring Irish farmers and the dairy industry have independent research information on cattle breeding and its interaction with farm management and milk quality.
- ✚ Development of Terms of Reference for the review of ICBF’s GROW® service (as agreed at the most recent Breeding Consultation meeting). The focus of the review will be to ensure beef bull breeders have the information they need to supply the stock (and AI) bulls required by suckler (and dairy) herds, while at the same time ensuring bull buyers have the information they need to make good purchasing decisions. This consultation is on-going and will involve the wider industry before any final decisions are taken.
- ✚ The development of a revised application to Interreg for support of the OptiMIR project. This is a collaborative effort with research organisations and milk recording organisations in a number of European countries including Ireland. A summary of this project can be found on the OptiMIR website (www.optiMIR.eu).
- ✚ A review of progress made by Sheep Ireland and its goals for the future. This will culminate with the visit by Peter Amer in mid- September and a report to the Interim Sheep Board.
- ✚ The development of AHI’s project plans for reducing mastitis in Irish dairy herds.

The scope of this recent work reflects ICBF’s commitment to providing active leadership in innovatively exploiting new opportunities for improving the profitability of Irish farms, with our focus primarily on the use of genetics.

4. Tully

The fourth of five live-weights was obtained on all bulls at Tully on 2-09-2010 (Table 1). Bulls gained an impressive 2.2 kg across breed over the last 21 days.

Table 1. Live-weight and average daily gain (21 day period) of bulls, averaged by breed

Breed	AA (n = 5)	BA (n = 3)	BB (n = 2)	CH (n = 3)	LM (n = 32)	PT (n = 1)	SH (n = 2)	SI (n = 1)	SP (n = 2)
Average Live-weight (kg)	579	685	566	597	619	520	604	595	572
Average daily gain (kg)	2.1	2.4	2.0	1.9	2.2	1.9	2.5	2.4	2.0

- ✚ Bull owners and breed societies have received letters and e-mails, respectively, updating them on the performance of bulls to date. Also, AI companies have received the latest performance figures of bulls, along with all other relevant information.
- ✚ Pictures for the launch of the up-coming ICBF Beef Breeding event took place this week, and will feature in next weeks Irish Farmers Journal. The event will take place in Tully on Friday, 8th October. There will be two seminars on the day which will start at 2.00 pm sharp and run simultaneously to each other, prior to the high health status sale, which will start at 5.00pm. The first seminar will take place in the sales ring where there will be a series of presentations to both HerdPlus and GENÉIRÉLAND beef farmers, which will give up-dates on developments within the services. The second Seminar will be located in an adjacent marquee and will see overseas visitors being informed about the role of ICBF and the information systems available to Irish beef farmers.
- ✚ Preparations are on-going at Tully in preparing the livestock and facilities for the up-coming event.
- ✚ A working draft for the event was sent to all those who will be participating on the day. The schedule for the day along with details about the high health status sale can be found by clicking on the Tully page, which is on the ICBF website i.e. <http://www.icbf.com/services/tully/index.php>.

- ✚ The list of bulls for the next intake has been generated and will be sent to all beef breed societies on Monday, 6th September.
- ✚ This week, bulls received hoof-care where it was deemed necessary. Bulls are also being halter trained on continuous bases.

5. Irish Grassland Association Annual Conference – 31st August 2010

- ✚ Francis Kearney gave a paper entitled “Future of beef breeding; Euro-Stars and Genomics” at the Irish Grassland Associations Annual Conference and Farm Walk. The event was held on Tuesday past, in the Woodlands Hotel, Waterford and afterwards on the farm of John and Paul Duggan, Portlaw, Waterford. Almost 200 farmers and people from the industry attended the event, with much interest and enthusiasm in the use of genetic information as a basis to improve herd and industry profitability. A copy of Francis’s presentation is posted on the ICBF website.

6. Development of Euro-Star Indexes

- ✚ Following on from the paper presented by Francis and various articles from the Better Breeding Page in this Springs Irish Farmers Journal, Ross Evans has compiled a very comprehensive paper for the forthcoming Irish Charolais Newsletter, entitled “Development in Euro-Star Indexes; relationship with farm profit and genetic trends for the main beef breeds”. A copy of the paper is attached with this update and is essential reading for anyone wishing to understand and appreciate the level of progress that we are now collectively making in the area of beef breeding.

7. Milk Recording

National Milk Recording Results by County - 10 day Period 24/08/10 to 03/09/10								
	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	16	1,011	63	19.9	4.36	3.58	1.58	423
CAVAN	49	2,877	59	20.7	3.84	3.44	1.51	297
CLARE	34	1,726	51	21.8	3.77	3.45	1.57	263
CORK STH	255	17,737	70	19.6	4.06	3.56	1.49	289
CORK NTH	284	20,142	71	21.1	4.06	3.61	1.62	277
DONEGAL	17	1,473	87	20.7	4.16	3.49	1.58	345
DUBLIN	4	244	61	25.7	3.22	3.43	1.71	215
GALWAY	14	1,082	77	18.7	3.90	3.48	1.38	357
KERRY	133	8,374	63	21.2	3.83	3.50	1.55	325
KILDARE	18	1,220	68	21.0	4.08	3.51	1.59	377
KILKENNY	72	5,381	75	19.2	3.79	3.45	1.39	263
LAOIS	41	3,304	81	18.7	4.13	3.53	1.43	356
LEITRIM	5	223	45	27.5	3.56	3.35	1.90	228
LIMERICK	109	7,657	70	21.4	3.78	3.50	1.56	312
LONGFORD	10	785	79	20.5	3.75	3.37	1.46	310
LOUTH	16	1,258	79	21.2	3.65	3.40	1.49	316
MAYO	17	844	50	23.9	3.57	3.57	1.71	354
MEATH	60	4,833	81	20.9	3.96	3.49	1.56	366
MONAGHAN	49	2,383	49	21.1	3.78	3.35	1.50	344
OFFALY	41	2,755	67	21.2	3.94	3.50	1.58	320
ROSCOMMON	2	134	67	24.8	3.41	3.52	1.72	567
SLIGO	4	241	60	20.3	3.98	3.54	1.53	343
TIPPERARY NTH	60	5,508	92	18.7	4.01	3.67	1.44	287
TIPPERARY STH	71	5,647	80	18.6	4.04	3.54	1.41	326

	No. Herds Processed	No. Cows Recorded	Average Herd Size	Average 24hr Milk kg/Cow	Average Fat %	Average Protein %	Average F + P kg	Average SCC
WATERFORD	60	6,081	101	19.2	4.18	3.57	1.49	272
WESTMEATH	22	1,468	67	21.7	3.95	3.46	1.61	317
WEXFORD	71	4,835	68	18.6	4.01	3.58	1.41	329
WICKLOW E	13	1,047	81	19.5	3.67	3.42	1.38	398
WICKLOW W	12	808	67	20.2	4.11	3.51	1.54	454
National	1,559	111,078	71	21.0	3.88	3.50	1.55	332

National Milk Recording Averages by Province - 10 day Period 24/08/10 to 03/09/10								
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	950	72,872	77	20.2	3.97	3.55	1.52	294
Leinster	444	28,949	65	20.6	3.89	3.48	1.52	342
Connacht	38	2,390	63	22.6	3.75	3.49	1.64	321
Ulster	115	6,733	59	20.8	3.93	3.43	1.53	329

National Milk Recording Statistics - Herds, Cows & EDIY 03/09/10						
Milk Recording Organisation	Total Herds Recorded YTD 03/09/10	No. EDIY Herds YTD 03/09/10	% Herds EDIY	Total No. Cows Recorded YTD 03/09/10	No. EDIY Cows YTD 03/09/10	% Cows EDIY
Munster	3,556	998	28%	274,599	84,977	31%
Progressive	1,996	760	38%	173,871	65,820	38%
Tipperary	133	57	43%	11,880	5,731	48%
Connacht	150	59	39%	9,872	3,716	38%
Total	5,835	1,874	32%	470,222	160,244	34%

Recorded Cows by Milk Recording Organisation - Year on Year Comparison			
Milk Recording Organisation	YTD 2009 Cows Recorded 01/01/09 - 03/09/09	YTD 2010 Cows Recorded 01/01/10 - 03/09/10	2010 vs. 2009 Year on Year Difference (%)
Munster	254,935	274,599	7.2%
Progressive	174,432	173,871	-0.3%
Tipperary	11,077	11,880	6.8%
Connacht	9,363	9,872	5.2%
Total	449,807	470,222	4.3%

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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.

Development of Euro-star SBV indexes, relationship with commercial farm profit and genetic trends for the main beef breeds.

The availability of SBV beef indexes, sub-indexes and individual trait genetic information is still a relatively new development for Irish pedigree breeders and commercial farmers. However, the ICBF database is a powerful resource that is now providing vast amounts of objective information which will help to rapidly increase the reliability of these indexes in the coming years. The introduction of the AWRBS or more commonly known as the Suckler cow welfare scheme (SCWS) has had a tremendous impact on the amount of useable information that is now been returned to the database (Figure 1). In particular the amount of useful carcass information has seen a rapid increase in the last 2-3 years. Much of this is due to increased sire identification, from less than 15% in 2007 to 80-90% in the subsequent 3 years. The majority of the extra information available is from crossbred commercial animals so the industry is fortunate to have in place an across breed evaluation which uses all this crossbred information and also allows breeds to be compared within and against each other.

Figure 1. Trends in records qualifying for genetic evaluations by birth year of the animal for 9 traits in the Euro-Star SBV indexes .

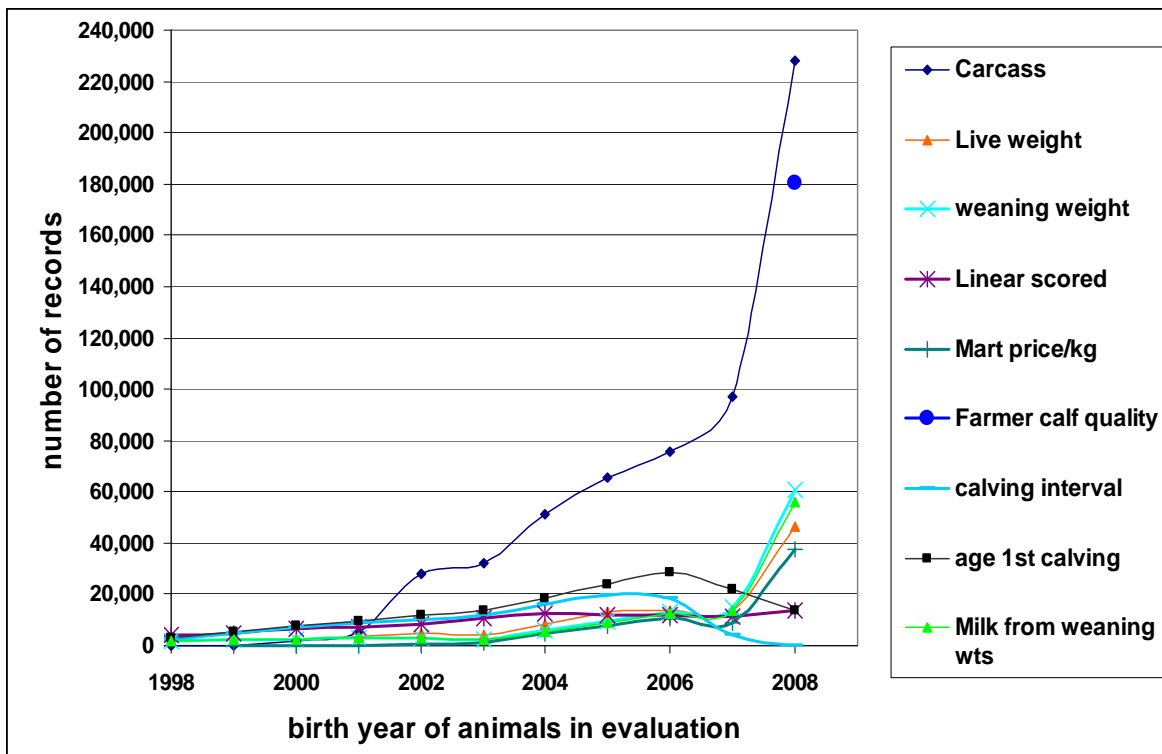


Table 1 below describes the amount of information per trait and per breed for the April 2010 evaluation. The breed with the largest amount of calving information is the Charolais followed by the Limousine, Angus, Hereford, Belgian Blue and Simmental with a large proportion of Hereford and Angus information coming from the dairy herd. The Charolais is also the breed with the most weaning weight, liveweight and mart price per kg information in the evaluations. These three sources of information come mainly from livestock marts. The Angus breed has the most carcass information available, however 64% of the 125,570 records came from dairy herds compared to only 14% of the 102,390 carcass records from Charolais sired animals coming from dairy herds. So the majority of Charolais carcass information is from Irish Suckler herds. In terms of linear scored animals the 3 breeds traditionally focused on linear scoring were the Limousine, Charolais and Simmental and hence these 3 make up the majority of scores available for analysis. Looking at the maternal traits it is obvious that the numbers of records available for maternal traits is much smaller relative to calving and beef performance related traits. Increasing the level of information for these traits is the big challenge in the next few years.

Table 1. Representation of Breeds (by Breed of Sire) for the various traits in the Suckler Beef Value Apr 2010

primary breed	Number of records																
	Total no sires	no AI sires	Calving Traits			Growth and quality traits					carcass		Maternal				
			calving ease	Gest ation	mortality	wean weight	livewt	mart p/kg	Linear score 150 – 300 days	feed intake	carcass	% HO & FR in dams	age first calved	mat wean wt	cow calving interval	cow surv	cull cow wt
Angus	12,150	331	378,538	73,021	401,149	5,371	10,030	2,764	2,590	143	125,570	64	21,420	2,887	13,047	13,047	9,734
Aubrac	679	44	10,079	469	10,473	895	436	139	1,170	45	1,841	25	1,225	316	741	741	186
Belgian Blue	2,658	343	143,283	37,892	159,067	11,652	8,462	8,068	4,410	80	43,323	34	10,791	2,194	6,622	6,622	5,064
Blonde Aq	931	104	23,462	1,234	24,429	1,723	916	819	1,123	94	3,768	22	2,054	442	1,124	1,124	405
Charolais	26,787	539	643,930	20,135	664,109	67,686	45,860	39,229	41,659	848	102,390	14	26,569	17,404	16,210	16,210	11,185
Hereford	7,083	470	189,425	29,004	195,125	2,976	5,941	681	2,870	161	61,773	65	12,560	1,928	7,549	7,549	5,193
Limousine	21,201	376	614,281	37,269	640,733	48,695	37,693	27,459	52,844	1,257	101,478	24	42,468	18,513	26,319	26,319	11,496
Partenaïse	337	30	4,971	288	5,408	349	281	128	307	21	545	19	407	64	153	153	84
Piemontese	270	72	3,885	287	4,011	303	166	71	418	12	541	27	442	82	225	225	50
Romagnola	31	11	345	11	304	26	26	6	1	1	69	30	36	0	23	23	11
Salers	1,252	52	25,208	1,828	26,003	1,316	1,175	650	1,067	77	3,755	19	2,766	512	1,632	1,632	348
Shorthorn	1,760	191	24,487	1,908	25,137	951	567	582	401	18	2,773	20	4,936	834	3,146	3,146	750
Simmental	6,029	298	136,775	10,380	139,657	12,298	10,566	4,147	11,600	934	30,900	29	17,558	7,509	10,755	10,755	3,623

€uro-star Suckler Beef Value (SBV)

The SBV combines all of the indexes for both terminal and maternal characteristics into an overall profit index. The SBV is weighted for each of the sub-indexes in line with the average percentage of animals born from a sire which end up in the various segments i.e. based on the percentage of animals which are either 1) sold for export (15%), 2) slaughtered in Ireland (62%) or 3) end up as replacements back in the Suckler herds (23%). However some sires are used specifically and almost exclusively for certain markets such as the export market or the Irish finishing market and therefore the purchaser will want to choose a sire to transmit the traits which will deliver profit in these markets. However, failure to take cognisance of calving difficulty and maternal traits and also could result in a significant deterioration in these traits over time if an antagonistic relationship exists between these traits and growth or muscle traits. This in turn will affect overall farm profit through increased costs of production. Traits like growth rate, weight and conformation are highly heritable and change can take place rapidly. Traits like maternal milk and fertility however are less heritable and require more time to make improvements but nonetheless the importance of these traits at farm level justifies their inclusion in the overall index. The widespread use of genetic indexes and a breeding programme based on these indexes will increase gain in economically important traits and ultimately profitability on suckler farms.

Relationship between €uro-Stars and profit on commercial farms

The introduction of new indexes can often fail to capture the imagination of breeders and farmers as the link between the index and profitability has not been proven. AI bulls will often have a good deal of information through their progeny and a farmer is likely to pick a bull based on the available indexes as he rarely gets to see the AI bull in the flesh. However, farmers who use stock bulls will more often buy a bull based on how the bull looks with scant regard to any performance related information. However, more often than not what looks to be a very good bull at a sale turns out to breed average or poor progeny. The €uro-Star indexes try to assess objectively how good a bull will be at breeding progeny based on what kind of progeny his sire and his dam bred. It tries to use all available information on the performance of the animal itself (weaning weight, linear scores etc) and the performance of its relatives (sire, dam, siblings etc) to build up a picture of how good the bull is likely to breed himself. Information is now available on the merits of using the €uro-Star indexes to boost profit on commercial farms. A recent analysis of 10,783 weanlings sold in the months of August, September and October 2009, through marts involved in the ICBF database performance has indicated that 5 star weanlings command €75 more at the time of sale, when compared with 1 star weanling's (Table 2). The higher prices were due to a combination of both better weight gain (an additional 60 kg at the point of sale) and better quality (an additional 25 cents/kg), resulting in much higher overall returns for farmers. These are remarkable differences and indicate the profit potential that can be generated from better beef breeding.

Table 2. Summary of weanling performance, based on €uro-Star ratings within commercial animals.

Sex	Data	1 star	2 star	3 star	4 star	5 star
Male Weanlings	Age at sale (days)	226	226	222	225	226
	Weight at sale (kg)	294	309	319	333	354
	Price (€/animal)	€485.0	€534.8	€570.4	€604.8	€669.5
	Price (€/kg)	€1.65	€1.74	€1.79	€1.82	€1.89
	Average SBV	€20.1	€43.1	€58.5	€74.2	€99.4
Female Weanlings	Age at sale (days)	227	227	226	226	231
	Weight at sale (kg)	258	276	282	295	316
	Price (€/animal)	€377.6	€424.3	€446.8	€467.9	€543.4
	Price (€/kg)	€1.46	€1.61	€1.58	€1.59	€1.72
	Average SBV	€21.3	€43.1	€58.6	€74.0	€98.8

Looking more closely at data from Table 2 indicates little difference in age at sale between the various groups of animals (on average all animals were sold at 225 days), but large difference in both weight and price at sale. Furthermore the differences were consistent for both male and female weanlings, indicating

that buyers will pay for weight and quality, regardless of the sex of the animal. Another interesting point to note from Table 2 is the fact that the differences were fairly consistent across all star categories, with a steady increase in weight and price at sale, as the star rating of the animal increased.

Another analysis looked at slaughter records from the ICBF database, for animals that met the following criterion; (i) slaughtered during February 2010, (ii) were progeny from the Suckler herd, (iii) had a known sire, and (iv) were less than 30 months at the time of slaughter (for steers, bulls & heifers). From an initial slaughter extract of over 120k record, this resulted in some 24,731 records for analysis. ICBF expects this figure to improve considerably over the coming months, as the impact of the Suckler Cow Welfare Scheme becomes more apparent (i.e., the scheme was first launched in January 2008, with the first animals only now being slaughtered from the scheme).

So how did the 5 star animals compare with the 1 star animals based on slaughter performance? Looking at data from Table 3 indicates that across each category of animal (steers, young bulls, heifers and cows), 5 star animals commanded premiums of €136, €94, €106 and €186 respectively, resulting in an overall premium for 5 star animals of €131 for each of the 4 groups. Across 20 animals (the average size of our National beef herd), this represents an overall gain of €2,620/year.

Table 3. Summary of slaughter performance, based on Euro-Star ratings.

Category	Criterion	1 STAR	2 STARS	3 STARS	4 STARS	5 STARS
STEERS	Carcass weight (kg)	354.3	375.4	382.4	386.5	396.7
	Price/kg	€2.86	€2.88	€2.89	€2.90	€2.90
	Carcass value	€1,016	€1,085	€1,109	€1,123	€1,152
	Age at slaughter (mths)	23.1	23.1	23.1	23.2	23.3
	Suckler Beef Value	€19	€42	€58	€74	€99
YOUNG BULLS	Carcass weight (kg)	393.2	403.3	409.5	417.2	423.8
	Price/kg	€2.89	€2.90	€2.90	€2.91	€2.91
	Carcass value	€1,138	€1,171	€1,190	€1,215	€1,232
	Age at slaughter (mths)	21.7	21.8	21.8	21.7	21.6
	Suckler Beef Value	€21	€42	€58	€74	€100
HEIFERS	Carcass weight (kg)	293.3	305	310.1	316.8	324.7
	Price/kg	€2.89	€2.92	€2.92	€2.93	€2.94
	Carcass value	€850	€892	€909	€931	€956
	Age at slaughter (mths)	22.4	22.4	22.5	22.6	22.8
	Suckler Beef Value	€20	€42	€58	€74	€98
COWS	Carcass weight (kg)	342.4	358.4	372	385.7	402
	Price/kg	€2.34	€2.38	€2.41	€2.43	€2.46
	Carcass value	€807	€859	€901	€941	€993
	Age at slaughter (mths)	99.7	91.6	89.3	83.5	80.4
	Suckler Beef Value	€17	€42	€59	€74	€104

Looking more closely at data from Table 3 indicates that most of the differences in performance were due to weight for age, with the 5 star animals being slaughtered at heavier weights (+41 kg), and similar slaughter ages. In addition, there were some differences in carcass quality, with the 5 star animals commanding a 6 cent/kg premium across each of the four categories of animals. Similar work by Teagasc Grange in 2009 showed that increasing the Beef Carcass subindex increased carcass weight and conformation and decreased carcass fat, but had no effect on weaning weight or dry matter intake. The study showed that for each extra 1kg difference in the genetic merit for carcass it resulted in a 1.3kg more carcass weight at slaughter.

While it has been shown that selection on the beef and weaning subindexes clearly shows a profit, more work needs to be done to focus on the benefits of improving the maternal traits in the suckler herd. Milk and fertility are key profit drivers on suckler farms but are often ignored in the pursuit of very high value weanlings. The result is that some of these weanling heifers go on to become replacements although they are utterly unsuited to the job. Ideally farmers should have a bull selected specifically for breeding

replacements or use an AI bull with proven maternal traits on some cows for breeding future replacements. While the information on milk through maternal weaning weights is low, it is improving all the time. Farmers should look closely at the milk and fertility indexes when choosing an AI or a stock bull with the intention of keeping replacements.

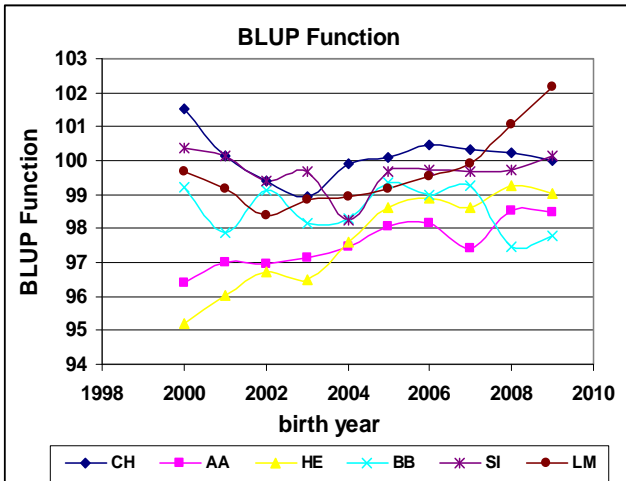
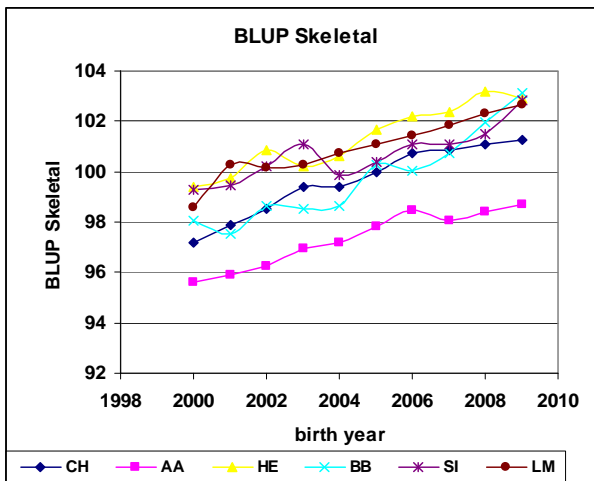
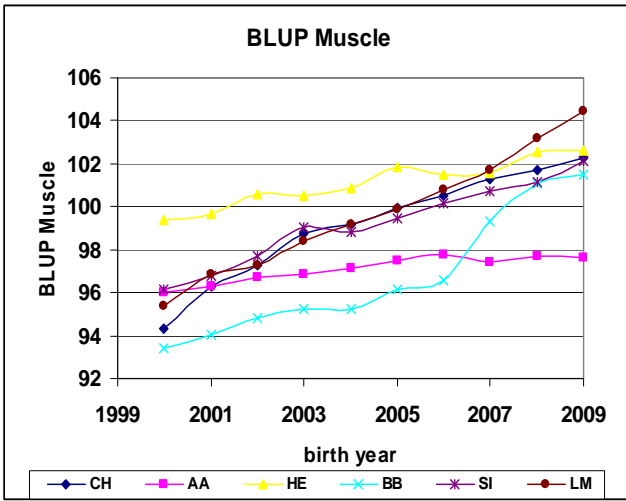
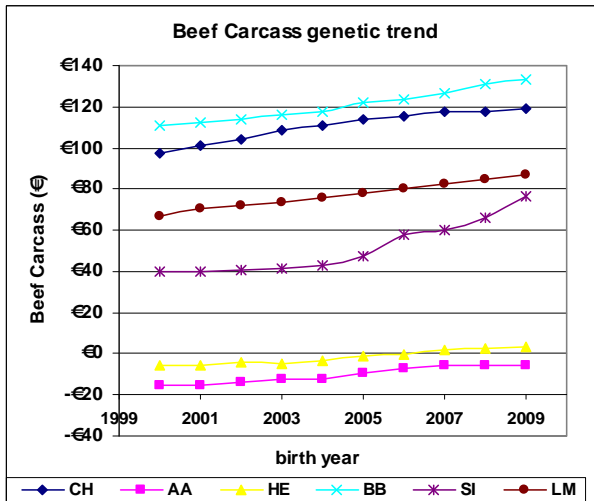
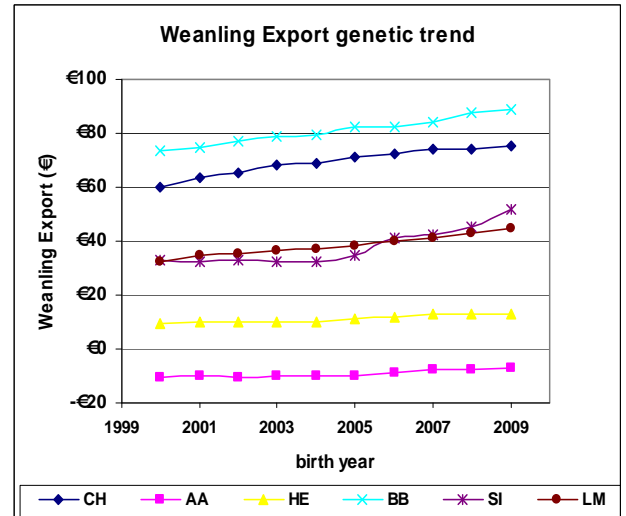
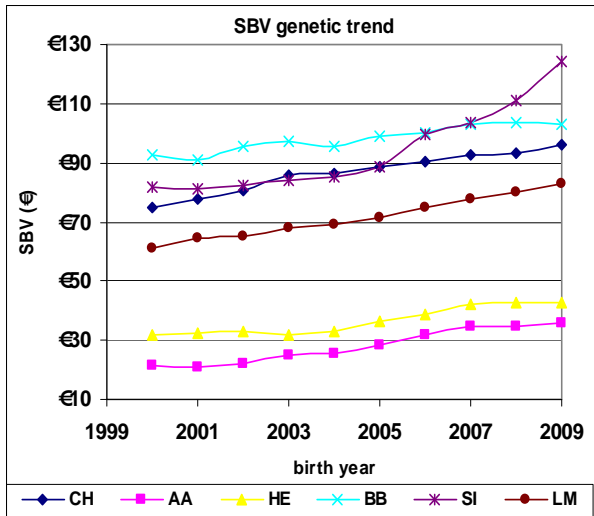
Genetic Trends

Genetic trends by year of birth for various profit indexes and traits give an indication as to the direction the breed is moving in as a result of selection decisions made by all facets related to that breed i.e. AI companies, herdbooks, pedigree breeders and commercial purchasers. Table 4 below gives an indication as to the number of pedigree animals from each breed in the genetic trend comparisons below. As expected the larger breeds the Charolais and Limousine have many more animals compared to the Belgian Blue.

Table 4. Numbers of pedigree males and females with indexes in each breed for the 6 numerically most prevalent breeds used to determine the genetic trends in Figure 2.

Birth year	CH	LM	SI	AA	HE	BB
2000	10,074	5,646	5,065	2,865	2,769	638
2001	11,182	6,306	4,959	3,043	2,604	720
2002	11,583	6,926	4,698	3,191	2,598	547
2003	10,800	7,317	4,554	3,415	2,605	354
2004	11,815	8,267	5,373	3,854	3,123	424
2005	11,895	9,077	4,927	4,518	3,293	383
2006	11,797	9,831	4,046	5,043	3,523	466
2007	11,425	10,155	3,923	4,124	3,521	540
2008	14,751	13,076	4,446	5,783	4,174	705
2009	12,460	11,527	3,505	4,635	3,861	603

Figure 2. Genetic trends for the 6 numerically most prevalent breeds for SBV, Weanling Export index, Beef Carcass Index, BLUP composites for Muscle, Skeletal, Daughter Fertility Index, pd for Calving difficulty, Daughter Milkability Index



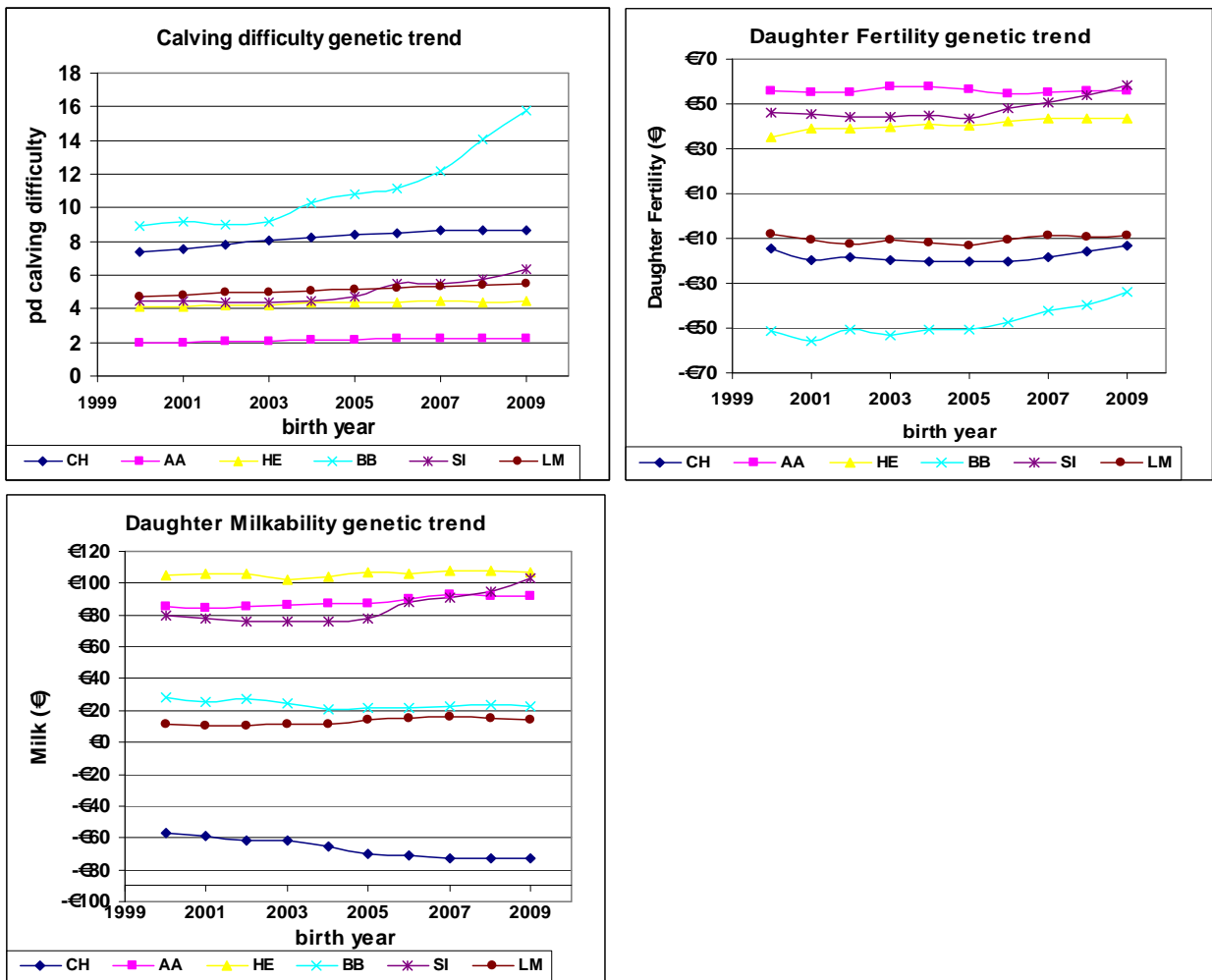


Table 4. Variation in the €uro-star SBV indexes, calving difficulty and linear composites for the Charolais Breed based on all pedigree males and females born in the last 5 years

Index/trait	Bottom 1pc	Bottom 20pc	Bottom 40pc	Mean	Top 40pc	Top 20pc	Top 1pc
SUCKLER BEEF VALUE (€)	€30	€74	€90	€96	€102	€116	€156
WEANLING EXPORT (€)	€40	€63	€72	€75	€78	€85	€107
BEEF CARCASS (€)	€65	€101	€114	€119	€124	€136	€166
DAUGHTER FERTILITY (€)	-€30	-€40	-€23	-€16	-€9	€7	€50
DAUGHTER MILK (€)	-€115	-€91	-€80	-€75	-€70	-€57	-€1
PD Calving Difficulty (%)	16	10	9	8	8	7	4
MUSCLE INDEX	82	95	100	102	104	109	125
SKELETAL INDEX	79	95	100	102	104	109	125
FUNCTION INDEX	75	91	97	99	102	107	126

Observations on genetic trends

Looking at the genetic trends in SBV there is a small but steady improvement in overall SBV in each of the 6 numerically predominant breeds. All the breeds seem to have improved mainly in the beef performance traits when assessed by examining the Weanling Export, Beef Carcass, BLUP Muscle and Skeletal indexes. However for some of the breeds this improvement seems to have come at the cost of some deterioration in another trait such as calving difficulty and functionality in the Belgian Blue and milkability in the case of the Charolais. It is very important when choosing selection candidates for the next generation that cognisance is taken of these less obvious traits such as calving difficulty and milk and fertility. Progress can still be made in the terminal traits while at the same time halting the decline in

the maternal traits. One point to note about the comparisons above is the large difference in the number of animals compared for each of the breeds with 20 times more pedigree male and female selection candidates available in the Charolais breed compared to the Belgian Blue breed. The luxury of a larger population base to select from is that there is better odds of identifying more superior animals each generation to make genetic progress. Table 4 shows the variation in the indexes within the Charolais breed. There is large differences when one compares the best with the worst animals for any of the indexes or traits, for example there is a difference of €101 per progeny born for Beef Carcass Index between the Top 1% and the Bottom 1%. Similarly for Daughter Milk there is €14 of a difference between the Top 1% and Bottom 1%. The comparisons in Table 4 are based on all pedigree animals in the Charolais breed born in the last 5 years. They are the values used to calculate the stars and are updated 4 times a year.

Conclusions

The Euro-Star indexes are proving to be an effective tool to increase the profitability of commercial beef farmers whether the farmer is selling weanlings, or finishing cattle for slaughter as is evident in the mart and factory comparisons above. The improvement in reliability for the maternal traits is the next big challenge but hopefully the additional sire recording on the current generation of commercial suckler replacements will help to address the low level of data available. Trials such as the Grange Suckler Trial will be important in helping to validate these maternal traits. Enhancement and refinements will continue to be made as more data and traits become available, and the economic values will be routinely assessed to ensure their validity into the future. It is important that farmers and breeders use these figures as much as possible to help their breeding decisions. In reality a farmer should use the Euro-Stars to help him select a bull for superior weanlings and visual assessment to ensure the bull is functional and has no obvious defects so he will last in the herd for a long time. If the bull has been linear scored then the Functional Index and individual feet and leg traits will also provide independent additional information on correctness of feet and locomotion.