IRISH CATTLE BREEDING FEDERATION

HerdPlus

Profit through Science

National Development Plan
Transforming Ireland

IRISH CATTLE BREEDING FEDERATION

HerdPlus / G€N€ IR€LAND Breeding Day

Corrin Mart, January 26th 2011.

Sponsored by:

Setting the Scene

- Our mission – *breeding more profitable dairy cattle …*
- Total involvement:
  - Genetic progress depends on your participation
  - The breeding industry depends on your participation
  - You depend on the breeding industry participation

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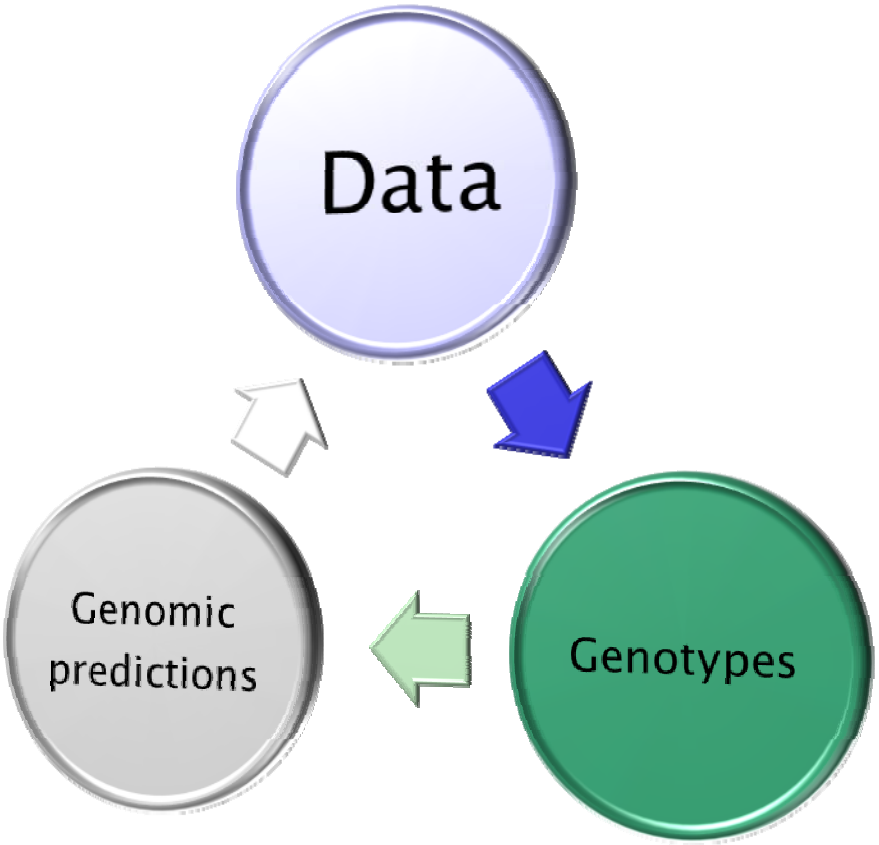
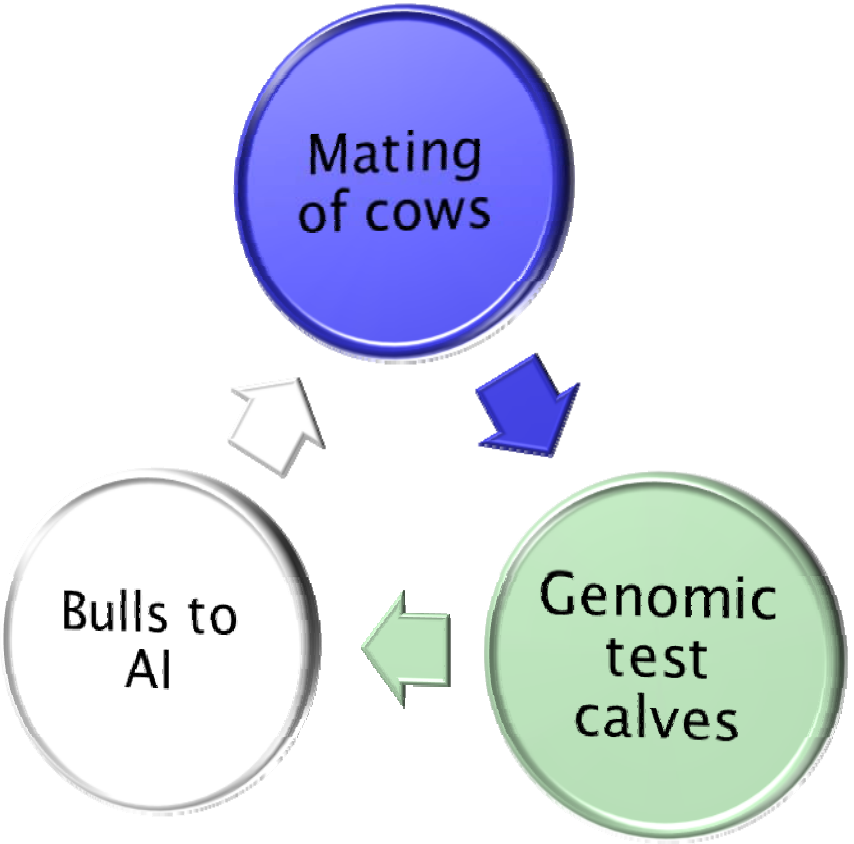
Total Involvement - Genomics

Training Genomic Predictions





Breeding with the benefit of Genomics

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G€N€ IR€LAND®
Breeding future Profits

- Research Review:
  - Science
  - Cost / Benefits
  - Delivery
- Recognition of achievements – FBD

  G€N€ IR€LAND® Awards

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Profit through Science

- Genomic service – Martin Burke
- Service developments – Kevin Downing

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Programme - AM

10.45am	Welcome/Setting the Scene (Brian Wickham)

Session 1 Research Review

11.00am	Dairy Genetic Evaluations (Ross Evans/ Francis Kearney)
11.15am	Breeding Progamme (Andrew Cromie)
11.30am	General Discussion/Questions

Session 2 Services 2011

11.45am	Genomics Service – Launch (Martin Burke)
12.00pm	G€N€ IR€LAND HerdPlus (Kevin Downing)
12.15pm	General Discussion/Questions
12.30pm	FBD G€N€ IR€LAND bull breeder awards
1pm – 2pm	Lunch

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EBI developments 2011
Ross Evans

- **New fertility evaluation**
- **New health trait evaluation**

Current Fertility evaluations: lactations 1-3 for CIV and Survival

Cow A

	1st Calving	2nd Calving	3rd Calving	4th Calving
CIV	370 days	365 days	380 days	Lowly heritable!
Milk	4,900kg	5,100kg	5,300kg	Good heritability!

Cow B

Current parameters have strong negative link between milk and fertility BUT parameters now 7 years old: need re-estimating

	1st Calving	2nd Calving	3rd Calving	4th Calving
CIV	410 days	390 days	400 days	Lowly heritable!
Milk	6,700kg	7,200kg	9,000kg	Good heritability!

New Fertility evaluations

Cow A

	1st Calving	2nd Calving	3rd Calving	4th Calving	5th Calving	6th Calving
CIV	370	365	380	370	350	
Milk	4,900kg	5,100kg	5,300kg	5,400kg	5,200kg	
CFS	85 days	75 days	83 days	63 days	80 days	
NS	1 insem	1 insem	2 insem	1 insem	1 insem	

Cow B

	1st Calving	2nd Calving	3rd Calving	4th Calving	5th Calving
CIV	410	390	420	600	culled
Milk	6,700kg	7,200kg	9,000kg	9,200kg	8,500kg
CFS	95 days	93 days	110 days	88 days	105 days
NS	2 insem	3 insem	2 insem	2 insem	5 insem

Negative link between milk and fertility is reduced with CFS and NS

Insemination traits are better biological predictors of calving interval

Other additional changes

- **Increase CIV cut-off limit 600-800 day**
  - Where an insemination is recorded
- **Specific heterosis effects included**
  - Differing heterosis for FRxHO, HOxJE, HOxMO
- **Cows with no milk recording but with fert**
  - 250,000 cows
- **Tighter definition of a contemporary group**
  - 180 days to 70 day period for grouping of cows
- **New software: actual reliabilities for cows**
- Age at first calving evaluated

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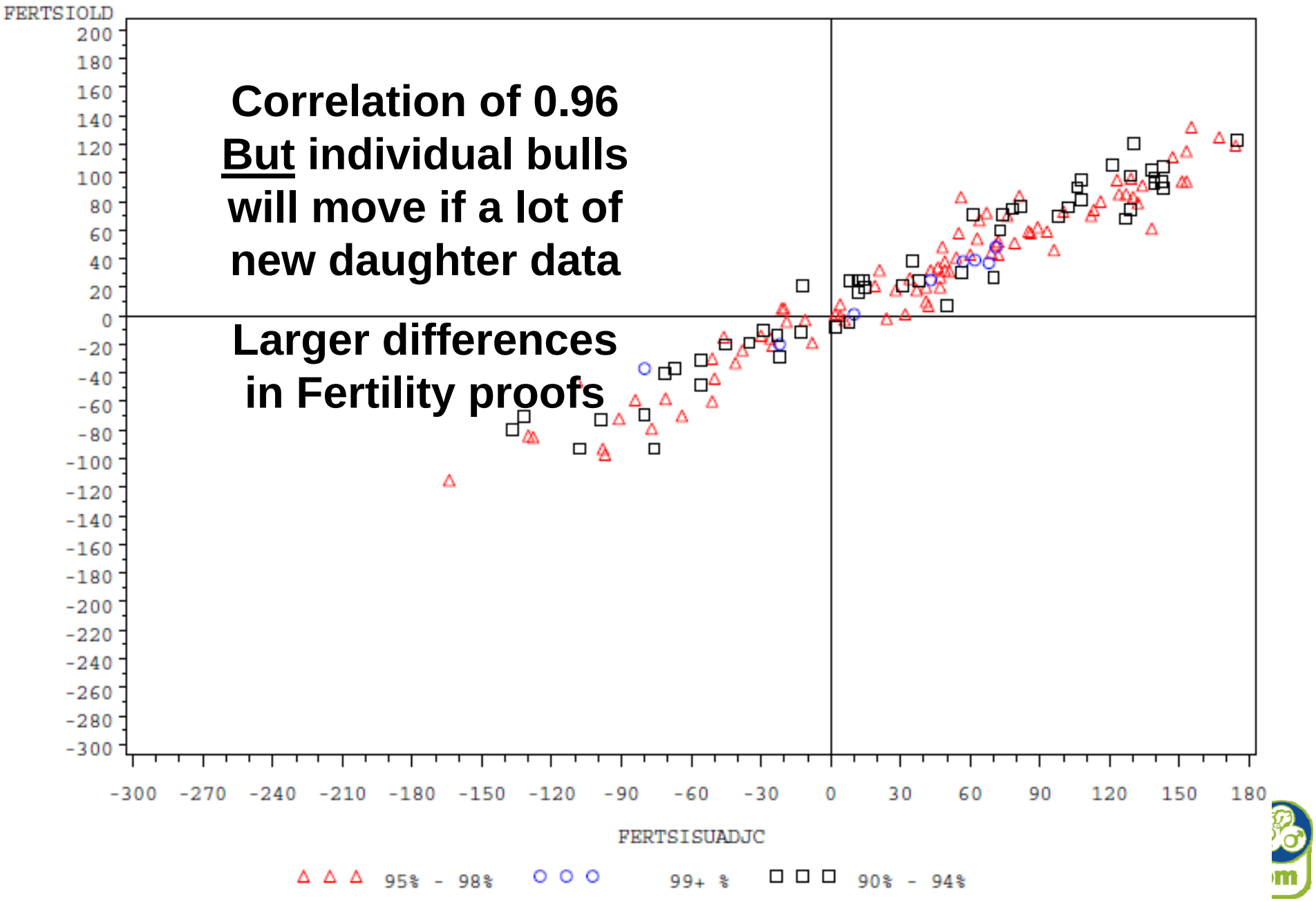
Comparing AI sires old versus new Fertility Sub-index



Correlation of 0.96

<u>But</u> individual bulls will move if a lot of new daughter data

Larger differences in Fertility proofs

Breed effects using AI sires with 60% reliability on new indexes

Breed	No of sires	Fertility SI old	Fertility SI new	Age 1st Calving (days)
FR	202	€83	€116	-2
HO	874	-€6	-€8	0
JE	14	€85	€66	2
MO	29	€78	€110	14
NR	4	€89	€128	1
SR	3	€87	€99	9

- **Rise for FR and MO sires**
- **Reduction in JE sires due to better handle on specific heterosis**
- **Age at 1st calving not factored into FERT SI yet**

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Comparison of index to phenotype

CATEGORY of new Fertility index	No of Cows	FERTSI new	FERTSI old	Phenotypic calving interval					Avg Civ
				CIV1	CIV2	CIV3	CIV4	CIV5	
FERTSI €100+	286,476	€123	€83	377	376	377	379	377	**377**
FERTSI €50 - €100	550,162	€73	€49	388	387	386	388	388	**387**
FERTSI 0 - 50	398,099	€27	€16	403	404	401	402	403	**402**
FERTSI -50-0	179,040	-€21	-€19	425	428	423	421	425	**424**
FERTSI < -50	52,843	-€72	-€59	458	463	457	451	458	**458**

CATEGORY of new Fertility index	No of Cows	Phenotypic survival					Avg SU
		SU1	SU2	SU3	SU4	SU5	
FERTSI 100+	286,476	0.92	0.92	0.90	0.87	0.82	**0.89**
FERTSI 50 - 100	550,162	0.87	0.86	0.83	0.79	0.74	**0.82**
FERTSI 0 - 50	398,099	0.86	0.81	0.78	0.73	0.68	**0.77**
FERTSI -50-0	179,040	0.83	0.77	0.71	0.67	0.62	**0.72**
FERTSI < -50	52,843	0.79	0.69	0.63	0.58	0.53	**0.64**

Conclusions

- Research close to completion
- New evaluation should give a more accurate picture of a cow's fertility
  - More parities, insemination data and more relevant genetic parameters to today's herds
- Should reward cows with better own and progeny fertility history
- Larger differences in sire Fertility proofs

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Genetics of mastitis and lameness

National Development Plan
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Health in the EBI

- Economic weight on mastitis placed on SCC with an assumed genetic correlation of 0.70
- Economic weight on lameness placed on locomotion with an assumed genetic correlation of -0.40
- Not optimal!

Lameness and Mastitis data

- 61,205 “positive” mastitis records >2003 from 40,000 lactations
  - Animals events
- 18,106 “positive” lameness records >2003 from 16,000 lactations
  - Hoof trimmers and Animal events
- Studies from abroad indicate heritability and potential to genetically improve these traits

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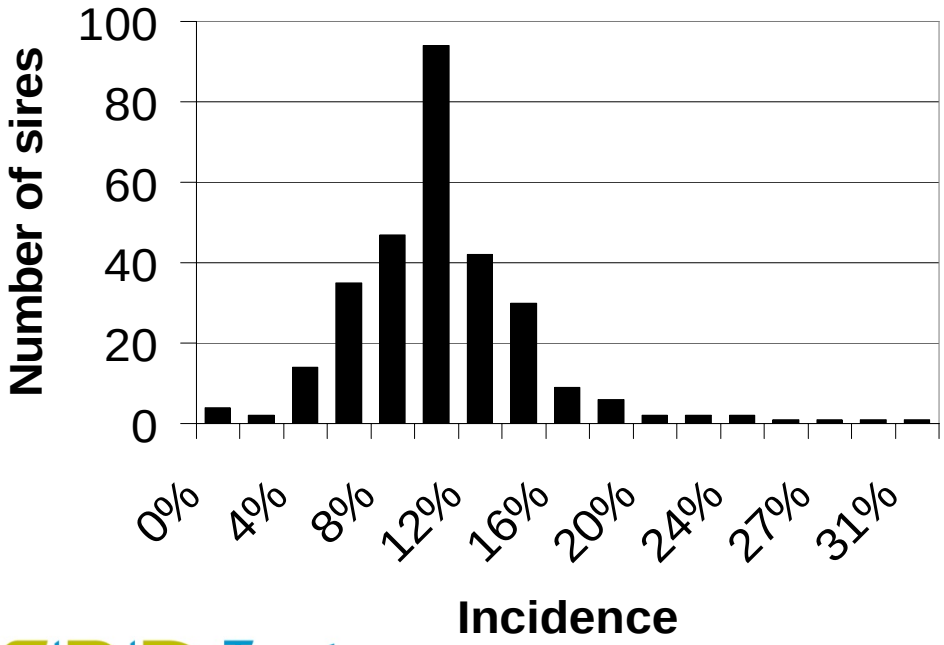
Genetic results - lameness

- Incidence – 10%
- Heritability – 0.04
- Repeatability -0.07



Correlated traits

Linear type: weak/moderate

- **Rear leg set: -0.05**
- **Foot angle: 0.05**
- **Locomotion: -0.35**

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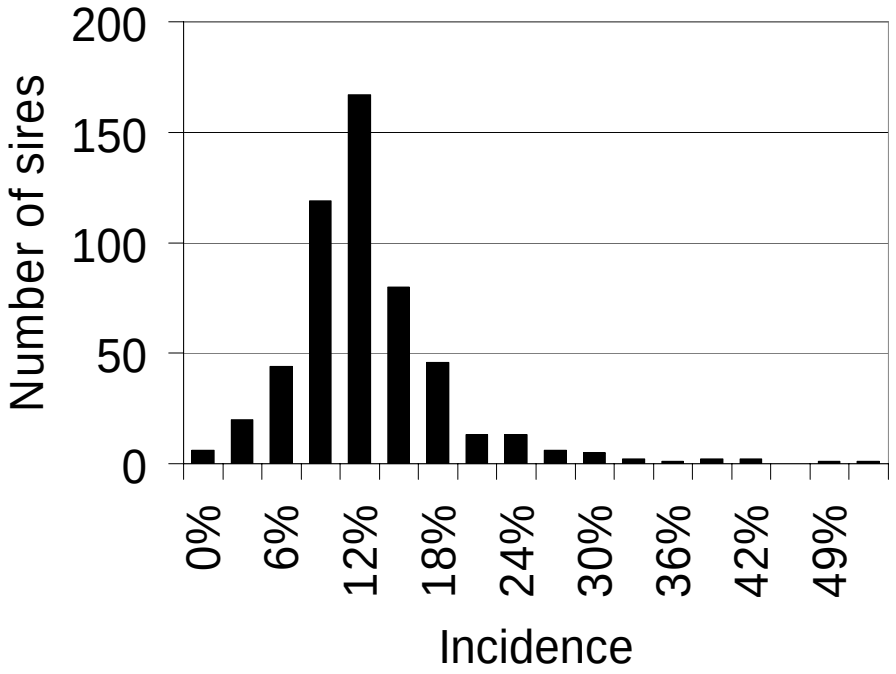
Genetic results - mastitis

- Incidence – 10%
- Heritability – 0.05
- Repeatability – 0.10



Correlated traits

- SCC ~ moderate/strong
- Linear type: weak/moderate
- Udder height
- Fore Udder attachment
- Teat length

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Recommendations

- Develop new health genetic evaluations
- Repeatability model for lameness and mastitis (all lactations)
- Correlated traits
  - Locomotion
  - SCC
  - Udder type traits (FUA, US, TL)
  - Review the weighting in the EBI
- Major national initiative to record health: Recording of health events is part of the dairy efficiency programme

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Genomic Evaluations

Francis Kearney

Genomic Evaluations

- Introduced in Ireland in 2009
- Using DNA profile to boost reliability
- Young bulls used before progeny proofs available
- Still only 40-60% reliability – proofs will change!!
- International standard for bull selection

Uptake of GS bulls

	2009		
Proof	% Use	Bulls /hrd	EBI (Rel)
DP-IRL	37	2.7	120(86)
DP-INT	29	3	133(56)
GS	34	4	179(55)

Uptake of GS bulls

	2009			2010		
Proof	% Use	Bulls /hrd	EBI (Rel)	% Use	Bulls /hrd	EBI (Rel)
DP-IRL	37	2.7	120(86)	25	3	146(76)
DP-INT	29	3	133(56)	34	3	155(47)
GS	34	4	179(55)	40	4	218(56)

- Number of straws of GS bulls has increased 6% since 2009
- Farmers still using an average of 4 GS bulls to spread their risk – Very Important!

Genomics – Current work

- Increase in reference population (5000 bulls)
- Use of chips with 3000 (3k) markers
- We can predict to 50k markers using a process called imputation with a high degree of accuracy (98%)
- Need at least sire genotype on 50k
- First results on 3k very promising
- Genomics for type traits (Spring 2011)

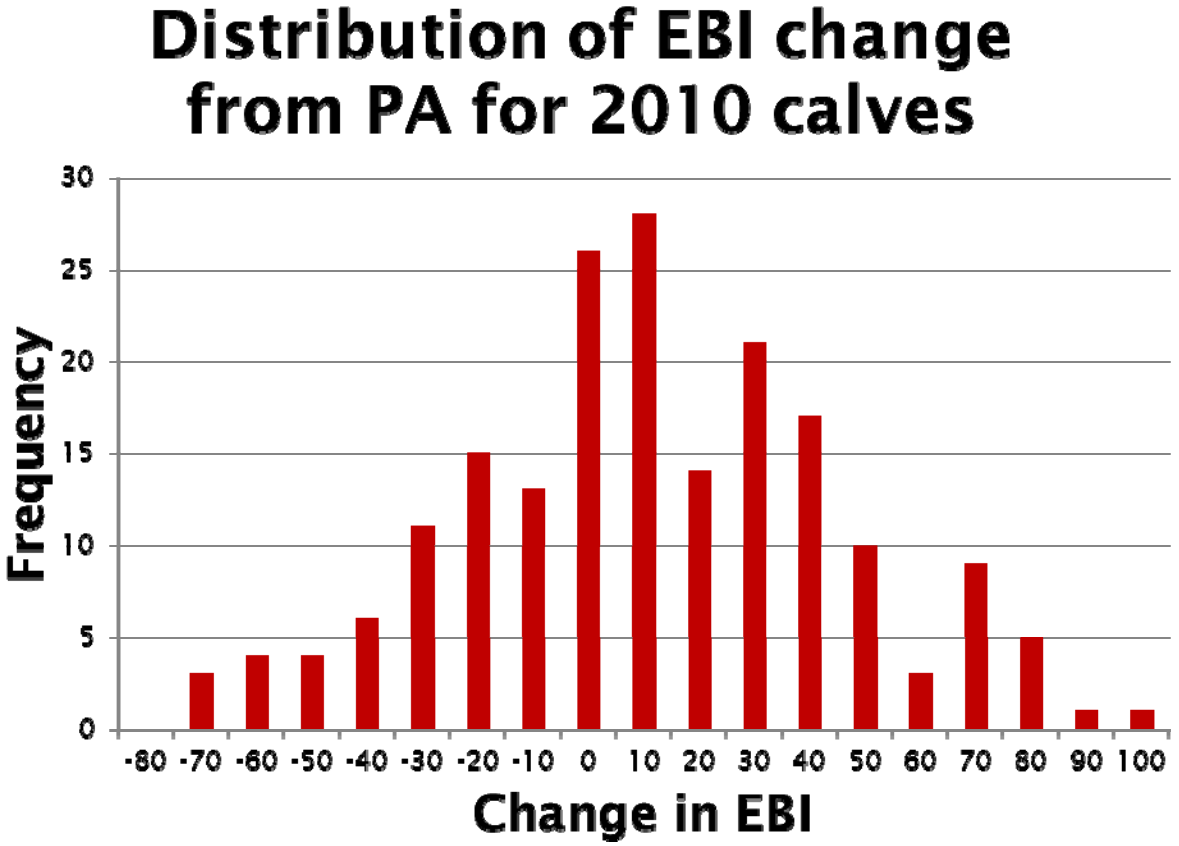
How have GS bulls performed?

- Test bulls from 2006 & 2007 with GS proofs
- Now received their proofs based on daughter s
- 63 bulls with ≥ 70% reliability for production
- GS proofs are better indication of daughter proofs (up to 20%)
- Overestimation of production proofs by about €10 (also for PA)
- Bulls not yet 99% reliability for production
- Too early for fertility traits

Genomics – Other breeds

- Need to use a 770k chip (HD) to facilitate other breeds e.g., pure FR, Jersey, NR, Crossbreds
- Number of bulls to form reference populations is low
- Pure FR is currently being researched (2011?)
- Technology is expensive, computing is intensive
- Use 50k to impute to HD to reduce cost?

GEBI - What to Expect?



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GEBI - What to Expect?

	Parent Average		Blended Genomic	
	Average €	Average Rel	Average €	Average Rel
EBI	127	31	133	49
MSI	58	36	59	58
FSI	58	25	64	41

- Positive change probably due to selective genotyping of higher EBI animals
- 70% PA, 30% Genomics on average
- Can be up to 50% Genomics or <10%

Summary

- Genomics will be integral part of breeding programmes
- Accuracy improving
- Bias will be reduced
  - more animals in reference population
  - better methodology
- Results are close to expectation (Production)
- Cost decreasing (B&W)
- Continue to use multiple GS bulls !!

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Developments in G€N€ IR€LAND

25th January 2011

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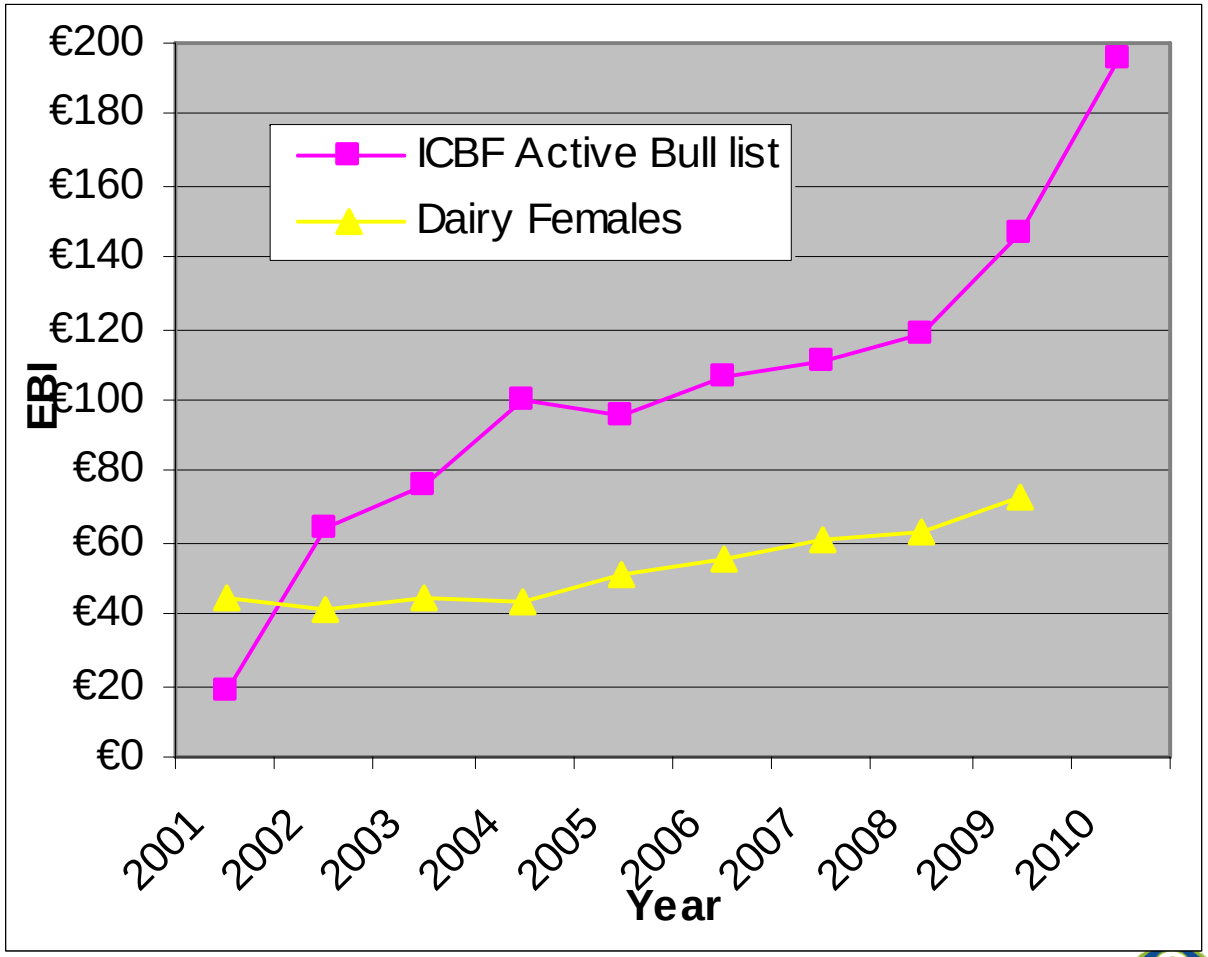
Genetic Gain in EBI.

- Past = No genetic gain.
  - Milk gains – fertility loss.
- Now €20/year and increasing.
  - G€N€ IR€LAND.
    - Influence of genomics (use of younger bulls)
  - Better imported sires available.



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G€N€ IR€LAND. Research in 2010

- Four major projects undertaken in 2010.
  1. Breeding programs to exploit genomics in Ireland – Noirin McHugh.
  2. Cost & benefit analysis of the program options – Peter Amer.
  3. Directed advice for Bull Breeders – Sinead McParland.
  4. Next generation herds – Ballydague research farm.

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(1) Role of Genomics.

- Genomics can double rates of genetic gain.
- Use genotyping as a pre-selection for potential AI sires (~50% gain)
- There is major potential in the genotyping of females (further ~50% gain).
  - Reliability & elite females.
- The number of animals selected to enter the progeny test has little effect on overall genetic gain.
  - Major change in “conventional” thinking.

(2) Cost:benefits.

- Very high rates of return.
  - €1 = €50-€100, depending on uptake.
- Genomic schemes are more cost-effective than progeny test schemes.
  - Twice the gain & half the cost.
- Achieving high levels of gain is dependent on having accurate genomic prediction.
  - More animals in training population, i.e., females, especially for traits such as fertility.

Cost:benefits

- Invest in genotyping females.
  - €250k in females = €20m per annum.
- Targeting of high merit herds with breeding advice – ***key.***
  - Elite calves & accuracy.
- Important role for "Next generation" herds in future.
  - Elite calves, accuracy, R&D & focus.

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(3) Bull Breeder Herds.

- Bull breeders, AI companies, ICBF, Teagasc.
- Group define bull mother criterion and pick sires of sons. Allocate sires to potential bull mothers.
- Letters sent from ICBF database, with suggested mating, but no commitment to purchase calf.
- 2200 cows targeted, 1200 with inseminations in Spring 2010, 350 to recommended bulls (=~100 potential bull calves born this Spring). AI companies now following up.
- Follow-up survey – letters too late (7 April 2010!)
- Letters will be out by 1 February this year.

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Program 2011- 3,500 cows

Variable	Mean	Std Dev	Minimum	Maximum
EBI	€130.2	€17.1	€105.0	€201.0
Milk SI	€57.0	€17.4	€16.3	€125.3
Fertility SI	€60.6	€18.0	€10.1	€125.9
New Fertility SI	€82.2	€28.1	€2.0	€205.0
Milk kg	6462	851	4291	11011
F+P kg	504	61	371	773
F%	4.22	0.39	3.11	6.02
P%	3.61	0.17	3.16	4.35
CI Days	364	13	301	390
Age at 1st calving	25.2	3.0	21.0	38.0

- Edits: Genetic & phenotypic. Non OJI daughters. Cap on dtrs/bull.

3.5k cows – Most Popular Sires & MGS.

Sire	dau
STOCK	269
RUU	150
BWZ	149
GMI	148
HFL	143
CWJ	139
HZO	130
LBO	129
NHS	112
LLO	102

MGS	dau
STOCK	214
UYC	135
GMI	130
MAU	123
MBH	107
LBO	99
JOS	97
MFX	87
CPA	80
ELC	64

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Sires of Sons - 2011

Variable	N	Mean	Std Dev	Min	Max
EBI	76	174	23	117	237
Rel	76	58	14	36	98
Milk	76	69	17	26	104
Fert	76	91	22	25	141

- 76 bulls selected (~200 original) based on;
  - Non OJI sons, EBI, relatedness to cow population, Milk & fertility "balance", EBI reliability.
  - Matings suggested for each cow.

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(v) Next generation herds.

- Genomics can double rates of genetic gain, but what if in wrong direction? New traits, e.g., mastitis, lameness, feed eff, GHG emissions?
- Establish elite herds and ensure accurate recording of these traits. Develop genomic predictions (& identify genes) for these traits.
- Additional opportunity to identify animals for the breeding program.
- Working closely with Teagasc to establish. Current focus on Balydague research farm. Additional possibilities being explored.

NEW G€N€ IR€LAND Program

- G€N€ IR€LAND 2011.
  - Focused on females (training and elite animals). Not Bulls. *The cow is key.*
  - Work with bull breeder herds (1000 herds & 100k cows). Directed advice re: matings. All heifers genotyped.
  - 30 new AI bulls per year to service industry (50 bulls selected from 5000 candidates with genomic EBI's from bull breeder herds)
  - "Next Generation" herds (5 herds & ~1000 cows). Under direction of Teagasc/ICBF.
- Structure & funding model being developed.

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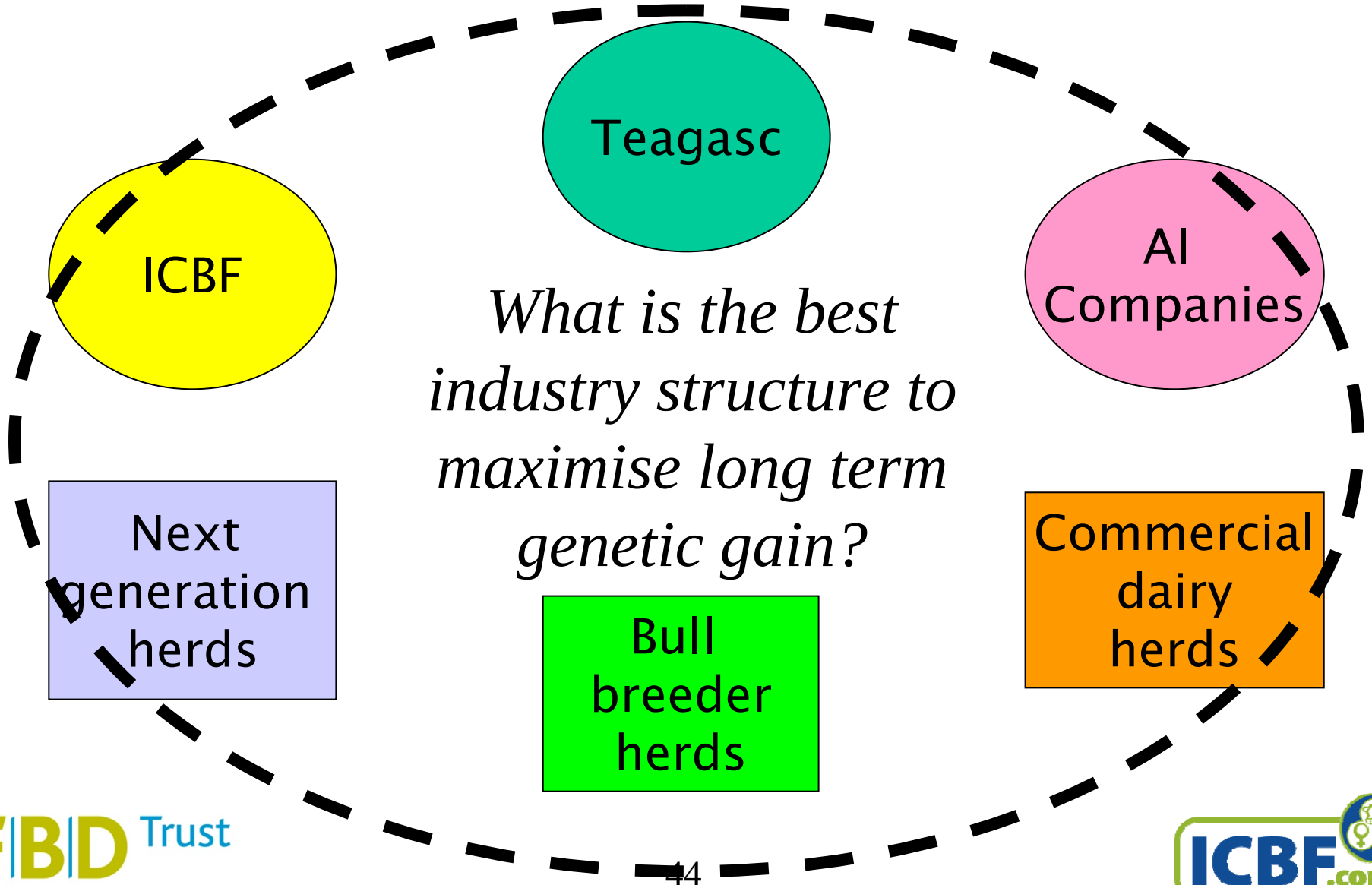
Key breeding structures.



Summary.

- Ireland is acknowledged as being a "world leader" in Genomics.
  - Technical – 2nd to launch.
  - Implementation – highest level of uptake.
- Now need to establish a suitable industry structure that will capitalise on potential of genomics.
  - Maximise genetic gain & manage risk.
- Proposition being developed. Feedback welcomed.

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Genomic Service 2011

Martin Burke

Does EBI Work?

	EBI - Top20%	EBI - Btm20%	Difference
EBI	€111	€7	€104
F+P kg	430	356	74
CI Days	383	407	24
Surv to 4th lact	83%	43%	40%

- Analysis of over 1,000 cows from Crookstown Discussion Group (winners of last years EBI€100 competition).
- How did top 20% on EBI perform compared to bottom 20%, based on performance over 1st 3 lactations?
- High EBI cows had better milk solids (+74kg), better fertility (-24 days) and lasted longer (+40% more to 4th lactation).

Reminder - why the interest in Genomics?

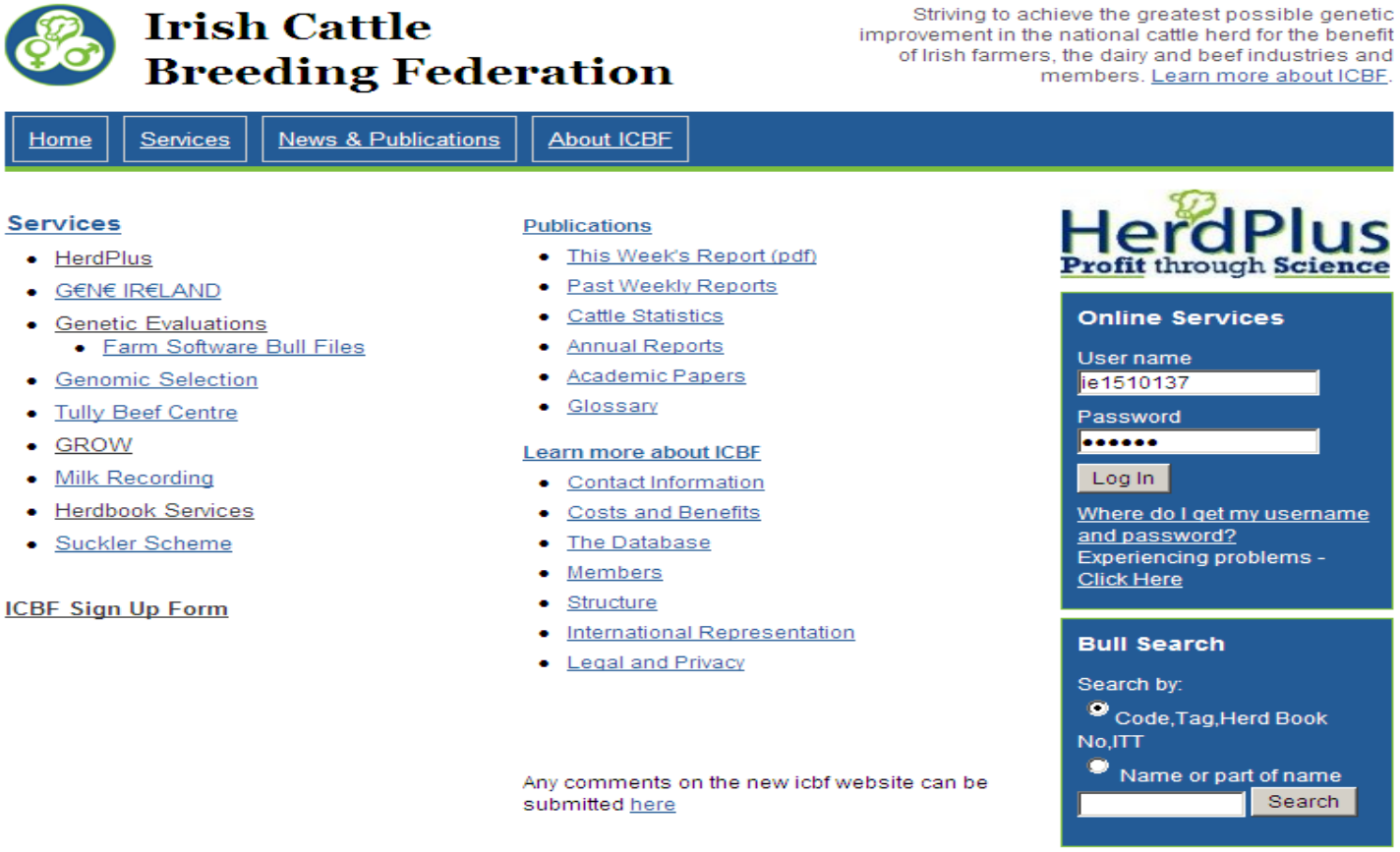
2 full brothers - Slogan v Addison

Trait		
EBI	€63	€-19
Milk kg	47	740
Fat kg	4	8.5
Protein kg	4	19.5
Calv. Int.	-2.6	+5.6
Survival	1.0	-2.3

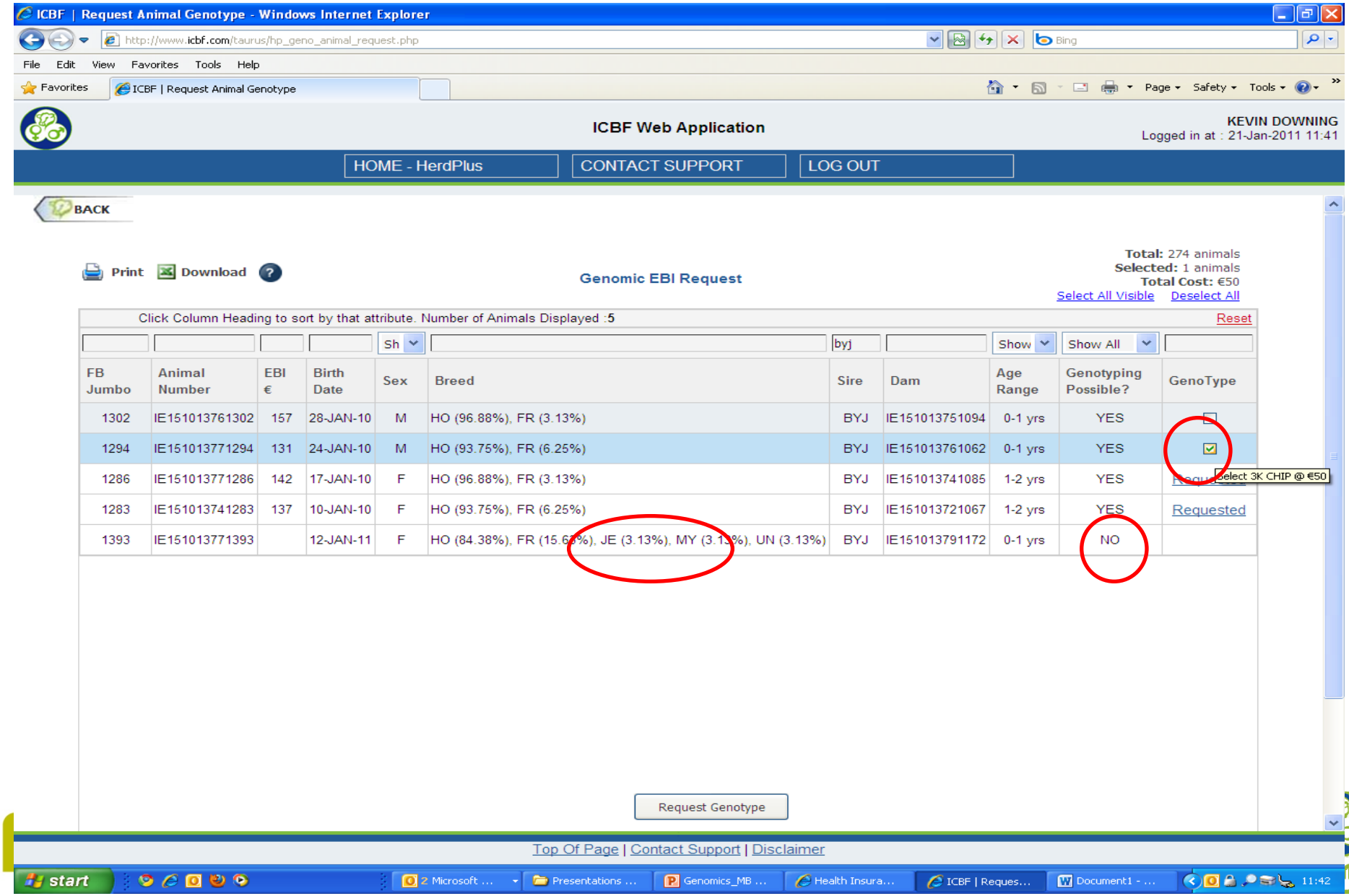
Imagine if we could know this at 3 months of age!!

Genomics Service – NEW !

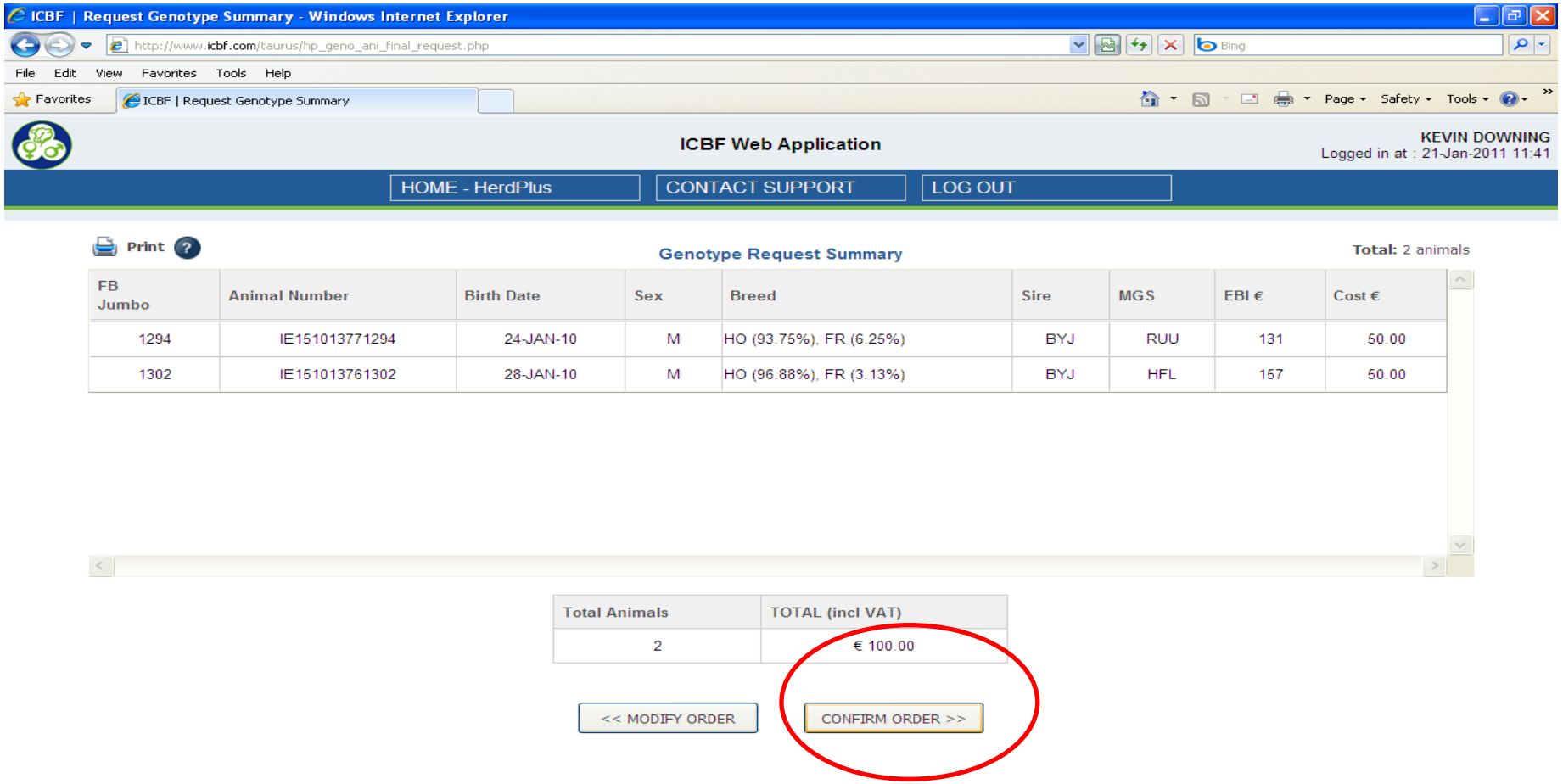
1. **Log onto ICBF HerdPlus® website**



2. Genotype Profile - “Tick” required heifers or bulls from your Genotype Profile online to request hair sampling kits for genotyping.



3. **Order & Payment – Once you have selected you confirm and pay by credit card or Laser, which prompts ICBF to post sampling kits next working day.**



4. Hair Kits – ICBF will post you out sampling kits for tail hair (one kit per animal) with instructions and return envelopes

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Instructions for Hair Sample Collection from Cattle for DNA extraction

Note: Weatherbys Ireland to be operational for 3K chip in next months

Figure 1

1. Check that the animal ID label on the collection card perfectly matches the ID of the animal (see Figure 1).
2. Hair samples should be plucked from the end of the tail (see figure 2) of the anim
   It is vital that the hair is clean and dry with the roots attached.
   When more than one animal is to be sampled extreme care must be taken to avoid contamination of hair roots from one animal to another.


Pull hairs from end of tail

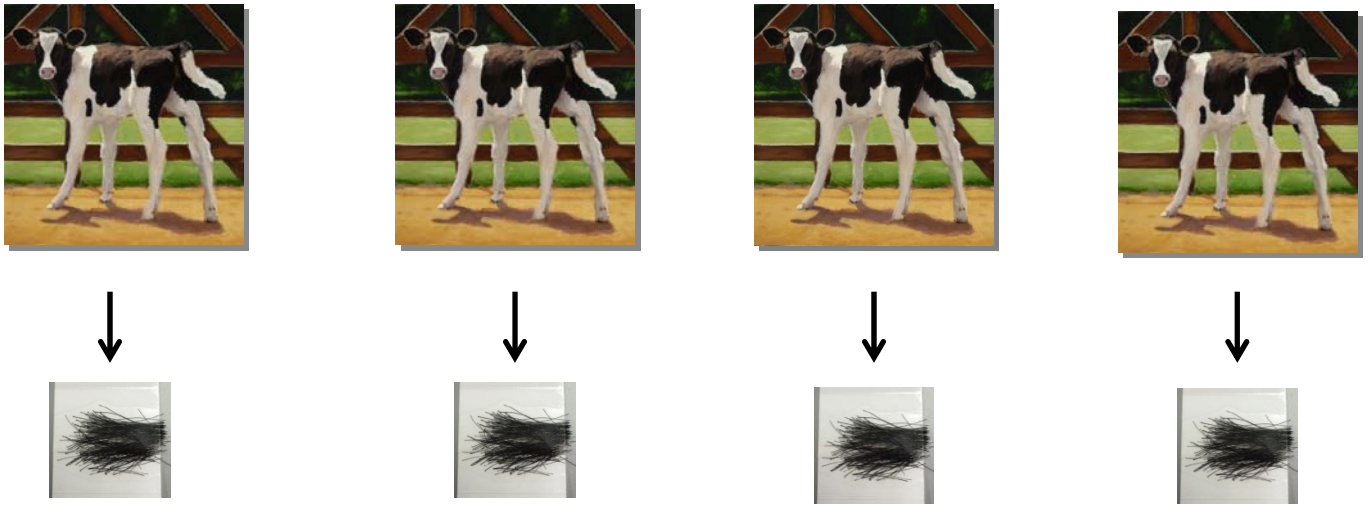
Figure 2

3. Make sure that the hair samples have follicles as it is the root follicles that contain the DNA and not the hair itself. We need 40 to 60 good follicles for each sample. (see Figure 3).


Figure 3a

4. Peal back plastic cover. Place the hair samples in the centre of the card with the clear plastic front piece, with the roots pointing inwards.(see Figures 3a &3b) This is also illustrated on the back of the collection card.
5. Seal the plastic cover smoothly over the hair follicles.
   If possible, avoid re-opening the plastic sheath.

5. **You take the tail hair samples for each animal and post back to ICBF in kits/envelopes provided.**



6. ICBF batch samples for DNA extraction and Genotyping at Lab

7. Lab sends Genotype file to ICBF ftp

8. ICBF Evaluation team calculate Genomic EBI for animals

Genomic EBI

9. ICBF will put each new animal Genomic EBIs on your own HerdPlus website

Genomic Evaluation Report						
Jumbo	802			Lact. No	0	
Tag	IE123456789802			Sex	F	
Name	ICBF			Sire	GMI (€100)	
Date of Birth	28-Jun-10	0y 1m		Dam	IE123456788111 (€95)	
Breed	HO 100%			Dam's Sire	OJI (€246)	
Date of Evaluation	28-Jun-10					
Index	Official Genomic Evaluation	Reliability %	% Weight on Genomics	Change in Evaluation from Parent Average	Reliability Increase with Genomics %	Direct Genomic Value
gEBI €	x	x	x	x	x	x
Milk Sub Index €	x	x	x	x	x	x
Fertility Sub Index €	x	x	x	x	x	x
Calving Sub Index €	x	x	x	x	x	x
Beef Sub Index €	x	x	x	x	x	x
Maintenance Sub Index €	x	x	x	x	x	x
Health Sub Index €	x	x	x	x	x	x
Milk Sub Index						
Milk (Kg)	x	x	x	x	x	x
Fat (Kg)	x	x	x	x	x	x
Prot (Kg)	x	x	x	x	x	x
Fat (%)	x.01	x	x	x.01	x	x.01
Protein(%)	x.01	x	x	x.01	x	x.01
Fertility Sub Index						
Calv Int (Days)	x.01	x	x	x.01	x	x
Survival (%)	x.01	x	x	x.01	x	x
Calving Sub Index						
Dir. Calv Diff (%)	x.01	x	x	x.01	x	x.01
Mat. Calv Diff (%)	x.01	x	x	x.01	x	x.01
Gest Len (Days)	x.01	x	x	x.01	x	x.01
Calf Mort (%)	x.01	x	x	x.01	x	x.01
Beef Sub Index						
Cull Cow Weight (Kg)	x.01	x	x	x.01	x	x.01
Carcass Weight (Kg)	x.01	x	x	x.01	x	x.01
Carc Conf (Grade)	x.01	x	x	x.01	x	x.01
Carcass Fat (%)	x.01	x	x	x.01	x	x.01
Maintenance Sub Index						
Cull Cow Weight (kg)	x.01	x	x	x.01	x	x.01
Health Sub Index						
Lameness (Locomotion)	x.01	x	x	x.01	x	x.01
Udder(SCC)	x.01	x	x	x.01	x	x.01

Genomics Service - Benefit

- Increase EBI reliability on young stock
- Equivalent to having 10-15 daughters
- Selection tool for identifying elite animals for breeding programmes
- Selection tool for identifying best replacements from young stock for you herd
- Potential to increase value of stock bull (sales)

Genomics Service - Notes

- Currently ICBF using USA Lab – Geneseek for 3k chip.
- Weatherbys Ireland fully operational for 54K chip and will be delivering genotypes for 3k in next month(s)
- ICBF working with IHFA to combine genomics & pedigree verification through IHFA .
- Genotype Cost through HerdPlus will be €50 (inc VAT). (Volume discounts TBD).
- Target turn around 4 weeks.
- Launching February 2011.

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Profit through Science

NDP National Development Plan Transforming Ireland

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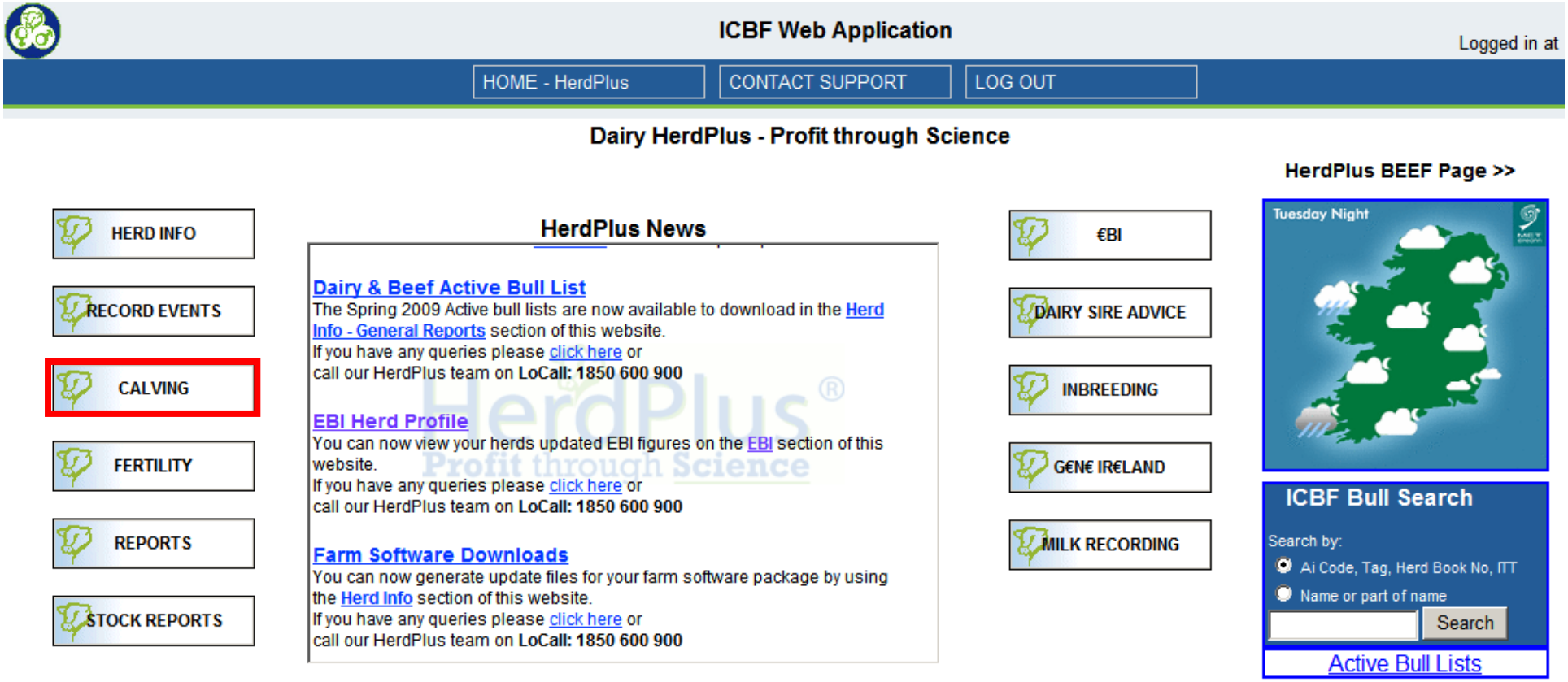
HerdPlus Developments

- Expected Calving Profile
- On-Line Catalogue Service
- Co-op Performance Report
- G€N€ Ireland
- Active Bull List

Expected Calving Profile



Expected Calving Profile

Report Name	Last Update	
Dairy Calving Report	November 1, 2010	Click Here
Expected Calving List	January 1, 2011	Click Here

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Expected Calving Profile

BACK

Expected Dairy Calving Profile

Expected Calving

Print Download ?

Click Column Heading to sort by that attribute. Number of Animals Displayed :**105**

					<7									
Animal Details		Serve & Expected Calving				Expected Genetic Merit of Newborn Dairy Calf								
FB	Lac	Last Serve	Last Bull	Exp Calf Date	Days	EBI €	Milk €	Fert €	Calv €	Beef €	Maint €	Health €	Milk Kg	Fat Kg
1135	0	14-APR-10	PKK	21-JAN-11	-4	137	59.4	60.1	28.6	-10.5	-1.5	0.7	156	11.8
1214	0	16-APR-10	GYK	23-JAN-11	-2	123	60.2	51.9	20.5	-11.1	2.85	-1.5	69	14.8
1033	1	22-APR-10	BHZ	29-JAN-11	4	153	64.2	79.8	25.0	-20.3	6.8	-2.9	94	11.5
1193	0	22-APR-10	GYK	29-JAN-11	4	129	65.8	57.9	18.9	-14.6	1.55	-0.8	94	19.3
944	2	23-APR-10	UPH	30-JAN-11	5	123	52.7	74.2	17.4	-17.2	-2.1	-2.6	113	8.3
1025	2	23-APR-10	UPH	30-JAN-11	5	172	75.6	84.7	29.7	-15.0	-2.45	-0.5	146	15.3
1029	2	23-APR-10	UPH	30-JAN-11	5	162	77.3	91.3	13.7	-19.3	.35	-1.1	174	13.3
1080	1	24-APR-10	UPH	31-JAN-11	6	171	61.2	96.9	29.3	-14.2	-3.1	0.7	129	13.5
1141	0	25-APR-10	BYJ	01-FEB-11	7	145	53.0	83.7	21.0	-15.8	1.1	1.9	153	11.9
1133	0	26-APR-10	BYJ	02-FEB-11	8	139	47.3	82.9	20.6	-18.9	5.05	1.8	69	8.8
467	7	26-APR-10	BYJ	02-FEB-11	8	138	60.5	70.0	19.0	-17.3	2.25	3.4	105	10.3
699	3	26-APR-10	BYJ	02-FEB-11	8	152	34.8	100.7	27.6	-7.9	-6.2	3.5	95	10.3
1024	2	27-APR-10	BYJ	03-FEB-11	9	118	41.5	73.7	17.9	-16.8	1.7	-0.2	82	6.5

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Expected Calving Profile

BACK

Expected Dairy Calving Profile

Expected Calving

Print Download ?

Click Column Heading to sort by that attribute. Number of Animals Displayed :8

					<7									
Animal Details		Serve & Expected Calving				Expected Genetic Merit of Newborn Dairy Calf								
FB	Lac	Last Serve	Last Bull	Exp Calf Date	Days	EBI €	Milk €	Fert €	Calv €	Beef €	Maint €	Health €	Milk Kg	Fat Kg
1135	0	14-APR-10	PKK	21-JAN-11	-4	137	59.4	60.1	28.6	-10.5	-1.5	0.7	156	11.8
1214	0	16-APR-10	GYK	23-JAN-11	-2	123	60.2	51.9	20.5	-11.1	2.85	-1.5	69	14.8
1033	1	22-APR-10	BHZ	29-JAN-11	4	153	64.2	79.8	25.0	-20.3	6.8	-2.9	94	11.5
1193	0	22-APR-10	GYK	29-JAN-11	4	129	65.8	57.9	18.9	-14.6	1.55	-0.8	94	19.3
944	2	23-APR-10	UPH	30-JAN-11	5	123	52.7	74.2	17.4	-17.2	-2.1	-2.6	113	8.3
1025	2	23-APR-10	UPH	30-JAN-11	5	172	75.6	84.7	29.7	-15.0	-2.45	-0.5	146	15.3
1029	2	23-APR-10	UPH	30-JAN-11	5	162	77.3	91.3	13.7	-19.3	.35	-1.1	174	13.3
1080	1	24-APR-10	UPH	31-JAN-11	6	171	61.2	96.9	29.3	-14.2	-3.1	0.7	129	13.5

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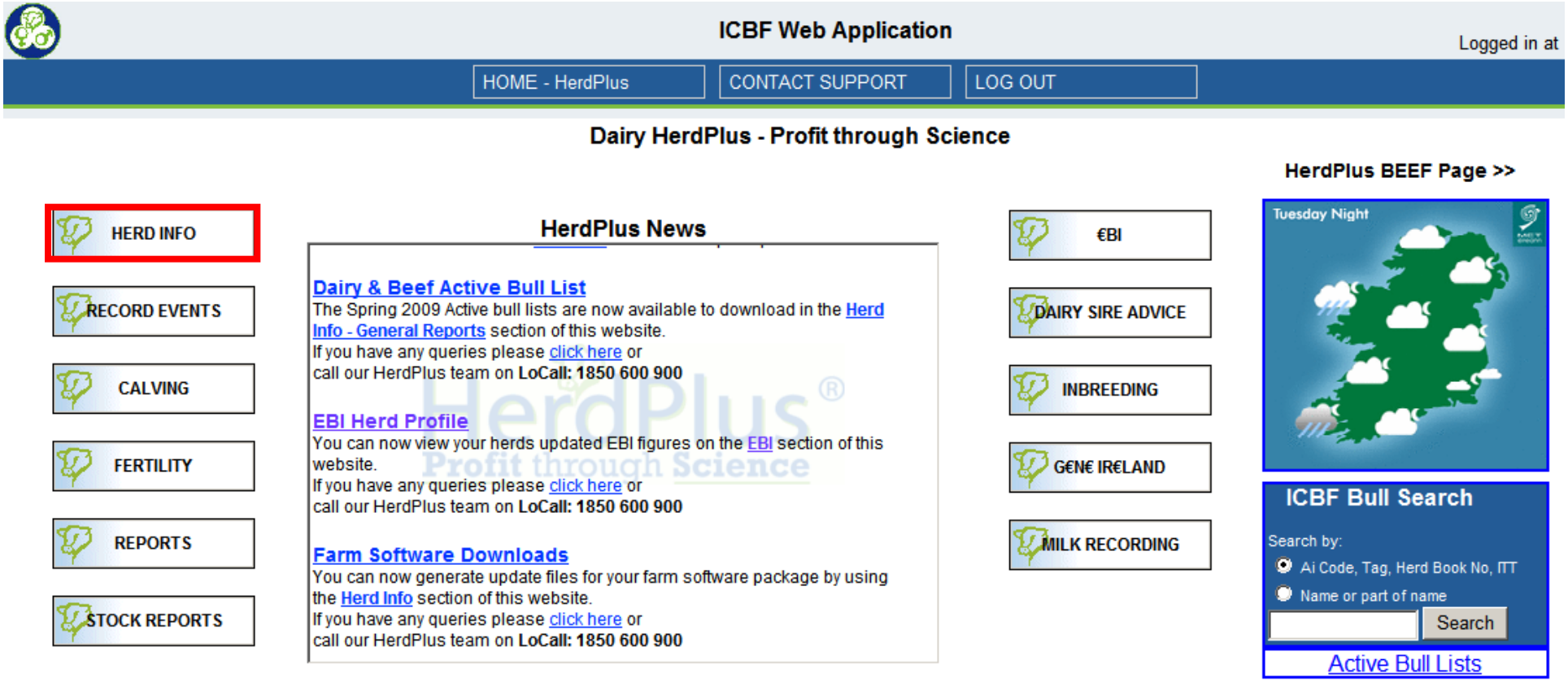
Password & Authorisation



Dairy/Beef Sales Catalogue

BACK

HERD INFORMATION

Herd Information | Basic Herd Profile | Pedigree Herd Profile | General Reports | Missing Sire | Farm Software Download

Basic Herd Information

Farmer Details	
Name	Brian Wickham
Address	Highfield House Bandon Co Cork
Phone	023/8820210
Mobile	353871234567
Email	info@icbf.com
Herd Type	Dairy Change Herd Purpose
Gene Ireland	Autumn 2009

Change Password

View / Change my data permissions

Create Sales Catalogue

Herd Details	
Indentifier	IE1510137
BTE	D2690749
Milk Supp No.	01550049
Last Calf Tag	IE151013741275
Birth Date of Last Calf	14TH November 2009
HerdPlus	DAIRY ELECTRONIC
Herd EBI	€95
Num of Animals	314
Milk Recording Detail	Test Date: 23-OCT-09 Num Cows: 103 Avg Milk: 17.598 Kgs Fat: 5.04% Prot: 3.8% Lac: 4.51% SCC: 199

Catalogue Service

- Select Animals for Sale from Herd List

Select your Animals for the Catalogue

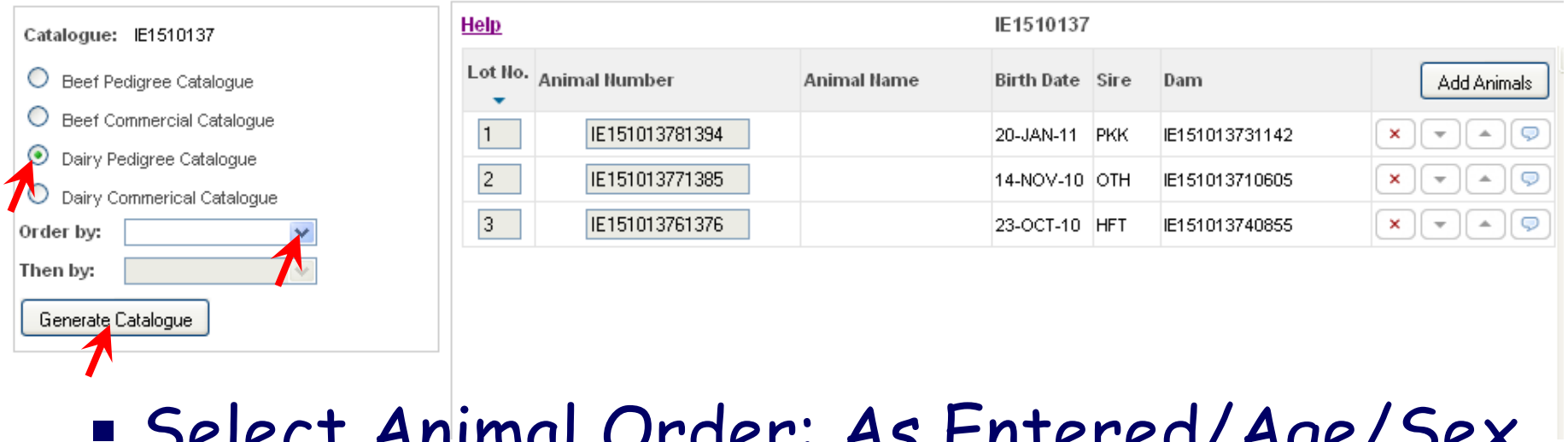
Total: 277 anim
Selected: 3 anim
Select All De-Select

Animals Displayed :**277** Reset

Animal Number	Birth Date	Sex (Show All)	Main Breed (Show All)	Sire Number	Dam Number	Lactation	Select For Sale
IE151013711396	22-JAN-11	M	HO	BHZ	IE151013791148		☐
IE151013791395	21-JAN-11	F	HO	BHZ	IE151013721067		☐
IE151013781394	20-JAN-11	F	HO	PKK	IE151013731142		☑
IE151013771393	12-JAN-11	F	HO	BYJ	IE151013791172		☐
IE151013741390	09-DEC-10	F	HO	TTY	IE151013791131		☐
IE151013771385	14-NOV-10	F	HO	OTH	IE151013710605		☑
IE151013761384	07-NOV-10	F	HO	OTH	IE151013760948		☐
IE151013781378	25-OCT-10	F	HO	TTY	IE151013781139		☐
IE151013761376	23-OCT-10	F	HO	HFT	IE151013740855		☑
IE151013731373	16-OCT-10	F	HO	UPH	IE151013790959		☐
IE151013791370	11-OCT-10	F	HO	TTY	IE151013770890		☐

Catalogue Service

- Select Catalogue Type: Commercial/Pedigree



- Select Animal Order: As Entered/Age/Sex
- Generate Catalogue

LOT 1

Parkduv Jerri 37 (EBI € 126) 16-Jan-2009 IE151013781171

Last Recorded Service: 02-May-2010 - BHZ

Overall Indexes	**EBI**	**EBI Rel**	**Milk**	**Fertility**	**Calving**	**Beef**	**Health**	**Maintenance**
	126	34	49.7	74.6	14.5	-8	-1.5	-3
Milk Traits	**Milk Kg**	**Fat Kg**	**Prot Kg**	**Fat %**				
	109	15.5	7	0.22				
Fertility Traits	**CI**	**Survival**						
	-4	2.3						

Breeding Data

Sire

Alta Tucano 63273531045 **by Olm**

Dam

Parkduv Jerri 27 ET IE151013731027 **by Lilas Moun**

Ancestry Data

Milk Kgs	BF%	PR%	BfKgs	PrKgs	Days	Lact	Calving Date
5012	5.21	3.61	261	181	305	1	16-01-09
6307	5.16	3.40	325	214	254	2	23-02-10

G Dam

Parkduv Jerri 5 EX 90 RI09277800 **by Arderne Silver Beat ET 0100538015**

Milk Kgs	BF%	PR%	BfKgs	PrKgs	Days	Lact	Calving Date
6277	4.84	3.46	304	217	305	1	23-01-98
7301	4.89	3.68	357	269	305	2	03-02-99
7859	4.79	3.78	376	297	294	3	10-02-00
8176	4.81	3.64	393	298	302	4	31-01-01
9827	4.98	3.69	489	362	305	5	
8382	5.35	3.74	449	313	305	6	
8349	5.24	3.70	437	309	298	7	
7914	4.87	3.84	386	304	305	8	
7679	5.82	3.56	447	274	305	9	07-02-06
6421	5.24	3.55	336	228	305	10	02-10-07
6189	5.45	3.56	337	220	242	11	10-11-08

Production Data

Commercial Catalogue

LOT 1

IE151013781213 Jumbo 1213 (EBI € 93) 16-Feb-2009

Last Recorded Service: 27-Apr-2010 - PKK

Overall Indexes	**EBI**	**EBI Rel**	**Milk**	**Fertility**	**Calving**	**Beef**	**Health**
	93	35	66.4	30.5	5.1	-5	-2.8
Milk Traits	**Milk Kg**	**Fat Kg**	**Prot Kg**	**Fat %**	**Prot %**		
	175	8.5	11.75	0.04	0.12		
Fertility Traits	**CI**	**Survival**					
	-1.6	.9					

Sire
Millstreet Merci 5 IE151111850320

Dam's Sire
Archibald 63811488961

Dam's Yield Data

Milk Kgs	BF%	PR%	BfKgs	PrKgs	Days	Lact	Calving Date
7666	4.21	3.27	323	251	305	1	16-01-06
7935	3.96	3.39	314	269	305	2	03-02-07
8813	4.27	3.39	377	299	305	3	10-02-08
9484	4.38	3.43	416	325	304	4	16-02-09
9411	4.11						

Dam's Production Data

HerdPlus Developments

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Co-op Monthly Milk Supply

	Litres			Fat %			Protein %			SCC ('000)			Total Cows	
Month	2010	2009	Diff '09-'10	2010	2009	Diff '09-'10	2010	2009	Diff '09-'10	2010	2009	Diff '09-'10	2010	2009
Jan	0	0	N/A	0	0	N/A	0	0	N/A	0	0	N/A	224	216
Feb	25,021	34,921	-28.3%	4.52	4.78	-0.26	3.57	3.81	-0.24	200	255	-55	242	237
Mar	94,490	102,948	-8.2%	4.31	4.39	-0.08	3.19	3.38	-0.19	171	131	40	240	245
Apr	116,719	121,201	-3.7%	4.01	4.16	-0.15	3.51	3.5	0.01	174	141	33	222	243
May	135,454	118,177	14.6%	4.37	4.11	0.26	3.6	3.5	0.1	107	134	-27	223	242
Jun	121,209	106,566	13.7%	4.31	4.16	0.15	3.57	3.56	0.01	108	163	-55	218	236
Jul	97,422	92,092	5.8%	4.49	4.25	0.24	3.59	3.58	0.01	144	156	-12	218	236
Aug	93,463	80,315	16.4%	4.66	4.67	-0.01	3.7	3.78	-0.08	149	219	-70	218	236
Sep	87,461	50,745	72.4%	5.05	4.9	0.15	3.91	3.98	-0.07	168	258	-90	218	228
SubTotal	**771,239**	**706,965**	**9.1%**	**4.43**	**4.34**	**0.09**	**3.58**	**3.58**	**0**	**145**	**167**	**-22**	**225**	**235**
Oct		46,746			5.07			3.98			243			221
Nov		21,016			5.62			4.14			374			221
Dec		0	N/A		0	N/A		0	N/A		0	N/A		221
Total		**774,727**			**4.42**			**3.62**			**162**			**232**

Co-op Monthly Milk Supply

Month	Total Milk Solids			Milk Output - Total Cows					
	Fat + Protein (Kg)			Litres / Cow / Day			Fat + Prot Kg / Cow / Day		
	2010	2009	Diff '09-'10	2010	2009	Diff '09-'10	2010	2009	Diff '09-'10
Jan	0	0	N/A	0	0	N/A	0	0	N/A
Feb	2,085	3,089	-32.5%	3.69	5.26	-29.8%	0.31	0.47	-34%
Mar	7,297	8,237	-11.4%	12.7	13.55	-6.3%	0.98	1.08	-9.3%
Apr	9,038	9,560	-5.5%	17.53	16.63	5.4%	1.36	1.31	3.8%
May	11,116	9,260	20%	19.59	15.75	24.4%	1.61	1.23	30.9%
Jun	9,835	8,471	16.1%	18.53	15.05	23.1%	1.5	1.2	25%
Jul	8,105	7,425	9.2%	14.42	12.59	14.5%	1.2	1.01	18.8%
Aug	8,046	6,988	15.1%	13.83	10.98	26%	1.19	0.96	24%
Sep	8,069	4,640	73.9%	13.37	7.42	80.2%	1.23	0.68	80.9%
SubTotal	**63,591**	**57,670**	**10.3%**	**12.56**	**11.02**	**14%**	**1.04**	**0.9**	**15.6%**
Oct		4,356			6.82			0.64	
Nov		2,112			3.17			0.32	
Dec		0	N/A		0	N/A		0	N/A
Total		**64,138**			**9.15**			**0.76**	

Useful Management Tips

- Use milk recording or CMT to pick out high SCC cows
- Thin cows (BCS <2.75) need 80-100 days dry on good silage
- Fat cows (BCS >3.25) need only 40 days dry on restricted silage
- Close 60% of the grazing area by early November (farm cover of 500-600 kg DM/ha)
- Monitor cows closely after drying off to catch new mastitis cases early

Milk Performance Scorecard

	Your Herd	Co-op Average	Co-op Top 10%	Your Rank out of 100	Your Star Rating [1]
Your Milk performance for 2010 (Jan - Sep) based on Co-op data					
Fat + Protein (Kg/cow) Average Fat and Protein yield per cow for your herd	283	260	329	66%	* * * *
Litres per Cow per Day Avg litres of Milk per cow from Jan - Sep 2010	12.56	13.25	16.5	38%	* *
Fat % to end September 2010 Weighted average Fat % from Jan - Sep 2010	4.43	3.73	3.94	100%	* * * * *
Protein % to end September 2010 Weighted average Protein % from Jan - Sep 2010	3.58	3.26	3.38	100%	* * * * *
Average Milk Value (cpl) Incl. VAT Average milk value received from Jan - Sep 2010, on your farm performance.	34.1	29.4	31	100%	* * * * *
SCC (,000 cells/ml) The weighted average Somatic Cell Count for Jan - Sep 2010	145	262	145	91%	* * * * *

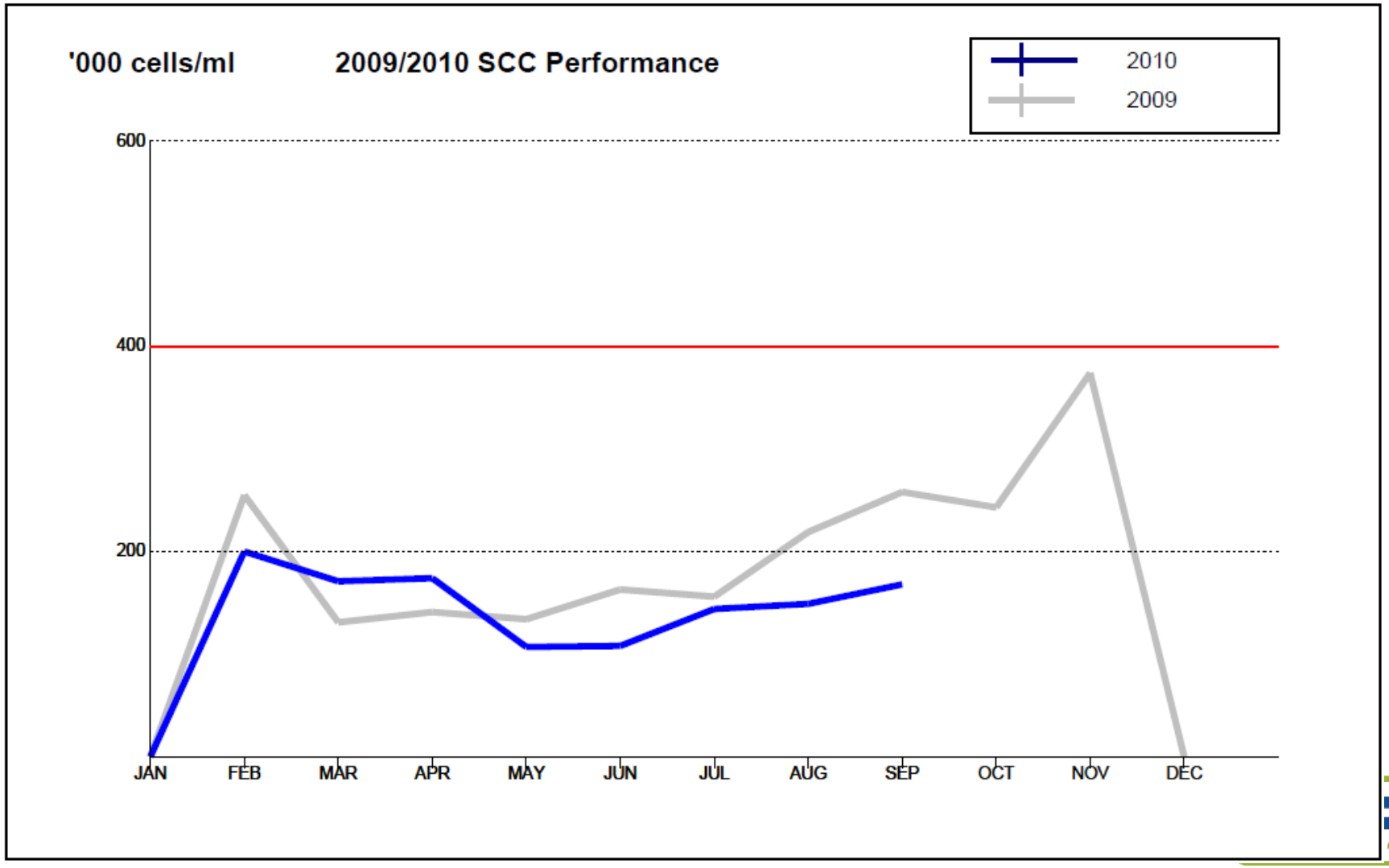
Herd Performance Scorecard

Your Fertility & Culling based on HerdPlus 2010 Calving Report					
Calving Interval (days) Average number of days between successive calvings for cows calved during the period	380	399	365	73%	* * * *
Days to calve 50% of herd Start **16/01/2010** - Median **17/02/2010**	33	40	20	62%	* * * *
Culling Rate Number of cows culled (Factory/Died) in the period **(19)** as a proportion of eligible cows **(222)**	9%	10%	0%	50%	* * *
%AI bred replacements %female calves born in the period from dairy AI **(60)** as a proportion of eligible cows **(222)**	27%	13%	29%	87%	* * * * *
Your EBI Statistics based on Herdplus EBI Report August 2010					
Herd EBI 2010 Average EBI for cows with EBI data	€126	€66	€88	100%	* * * * *
Yearly EBI Gain (2010-2011) Gain in Herd EBI based on; 0-1yr old, 1-2yr old & 22% replacement rate	€0	€4.5	€8	12%	*
EBI of 2010 Inseminations Weighted Average EBI of dairy AI bulls recorded in Spring 2010	€192	€178	€208	66%	* * * *

[1] * = 0 - 20% * * = 21 - 40% * * * = 41 - 60% * * * * = 61 - 80% * * * * * = 81 - 100%

Co-op Graphs Page

Monthly Somatic Cell Count (SCC) 2009-2010



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Co-op Performance Report

2010

glanbia

Barryroe
CO-OPERATIVE LIMITED
Lislevane, Bandon, Co. Cork
Tel: (023) 8840000 Fax: (023) 8840140
Email: barryroe@barryroeco-op.ie

LISAVAIRD
CO-OPERATIVE CREAMERY LTD.

Arrabawn Co-op

Wexford Milk Producers

Drinagh

2011

Connacht Gold
Co-operative Society Ltd

Dairygold

TIPPERARY
COOPERATIVE

Centenary
Thurles
Co-op

LAKELAND DAIRIES

Bandon co-op

TOWN OF MONAGHAN CO-OP

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Co-op Performance Report

- Daily Bulk Tank Collections
- Teagasc Discussion Group Report

Discussion Group Daily Bulk Milk Performance Report

Group Name:	HIGHFIELD GROUP	**Chairman:**	KEVIN DOWNING
Group Advisor:	GEORGE RAMSBOTTOM	**Secretary:**	MARTIN BURKE

		Latest Bulk Sample							Last Week Average (Mon-Sun)					
Name	**Herd No.**	**Date**	**All Cows**	**Ltrs.**	**Fat %**	**Prot %**	**SCC**	**F+P kg/cow**	**Cows**	**Ltrs**	**Fat %**	**Prot %**	**SCC**	**F+P kg/cow**
JOE MURPHY	IE1510137	18-Jan	124	15.3	4.11	3.57	184	1.21	124	13.3	4.01	3.58	153	1.74
JOHN MURHY		18-Jan	67	12.2	4.01	3.12	321	0.74	67	11.2	3.92	3.18	236	1.23
SEAN MURPHY		19-Jan	92	15.6	3.85	3.25	174	0.86	90	14.1	3.75	3.24	196	0.78

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G€N€ Ireland Programme

- Target of 60 bulls for G€N€ IR€LAND.
  - *Minimal OJI sons.*
  - 3 Breed Packs
    - Holstein-Friesian: Expected EBI €190
    - Pure Friesian:Expected EBI €134
    - Crossbred Pack:(HF, JE,HF x JE) Expected EBI €155
- Semen charged at €6.50/straw.

G€N€ Ireland Programme

- 25 straw pack (5 bulls x 5 straws)
  - Available to discussion group members.
- 35 straw pack (5 bulls x 7 straws)
- 49 straw pack (7 bulls x 7 straws)
- 70 straw pack (10 bulls x 7 straws)
- 105 straw pack (15 bulls x 7 straws)

- Sign-up today….first come & first served!

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Current Active Bull List

Current Active Bull List

Irish Cattle Breeding Federation

Striving to achieve the greatest possible genetic improvement in the national cattle herd for the benefit of Irish farmers, the dairy and beef industries and members. Learn more about ICBF.

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Active Bull Lists

	Dairy	Beef
	Current List	Current List
2010	Autumn 2010 (Pdf; Excel) *Support Material:* *Guide, Review and Analysis* Spring 2010 (Pdf; Excel) *Support Material:* *Guide, Review and Analysis*	
2009	Autumn 2009 (Excel) All Active Dairy Bulls Autumn 2009 (Excel)	Spring 2009 (Excel file)

Evaluations

- Main Evaluations Page
- Beef Results
- Dairy Results
- Conversion Equations
- Active Bull Lists
- Publication Schedule
- Notes

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Current Active Bull List

View as Excel

Evaluation Date:Dec 2010

Rank	Tag	Bull Name	Sire	Main Breed	Herd Book Status	HO %	EBI	Rel %	Proof Source	Milk	Fert	Calv	Beef	Maint	Health	Avail.	Price	Supplier
1	SOK	(IG) SUNNYBANK OMAN	OJI	HO	PED	63	279	55	GS	73	170	32	-7	2	8	High	20	NCBC
2	KOZ	KEVINSFORT OJI HAZE	OJI	HO	PED	94	264	61	GS	59	159	43	-4	-2	10	High	20	NCBC
3	MJI	MORRISHEEN OJI FRANK	OJI	HO	PED	88	262	55	GS	121	108	36	-20	12	4	Low	19	Eurogene/LIC
4	LRW	HSS VHA LOCHINVAR-ET S3F	HOLNZLM000000103180	HO	SRM	100	260	45	GS	129	118	33	-27	9	-1	High	19	NCBC
5	TIO	TIRONUI OM JOSKIN	OKU	JE	PED	0	248	41	DP-INT	105	127	15	-27	27	1	Medium	19	Eurogene/LIC
6	HYZ	SCOTTS VHA HYDRAULIC S2F	HOLNZLM000000103180	HO	SRM	100	237	45	GS	86	141	27	-43	30	-4	High	18	NCBC
7	FLT	(IG) FOWLERSTOWN STAN	OJI	HO	PED	91	234	62	GS	84	120	44	-15	-1	2	Medium	18	NCBC
8	MDW	MONOWAI HOM DELUCA-ET SIF	S711	HO	SRM	88	233	47	GS	88	124	34	-21	12	-4	High	19	NCBC
9	ROF	RALMA O-MAN CF CRICKET-ET	OJI	HO	PED	100	225	67	DP-INT	66	118	38	-4	-9	17	Medium	28	NCBC
10	WGB	WAIKARE MAUNGA BIGGLES	JERNZLM000000300528	JE		0	221	37	DP-INT	104	119	7	-50	44	-3	High	19	NCBC

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HerdPlus® Products

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EBI REPORT

CALVING REPORT

PERSONALISED POCKET NOTEBOOK

FERTILITY REPORT

BREEDING CHART

DAIRY COW REPORT

SIRE ADVICE

STOCK/NITRATES REPORTS

GENOTYPING SERVICE

ALL FOR €60 PER YEAR

Helpdesk Support Lo-call 1850 600 900

IRISH CATTLE BREEDING FEDERATION

FBD Trust & G€N€ IR€LAND Awards for Top Bull Breeders and Top Data Recording Herds. Dairy 2007 Program

25th January 2011

National Development Plan
Transforming Ireland

Top Data Recording Herds.

NAME	ADDRESS	CATEGORY	Score
MITCHELL HAYES	DAWSTOWN HOUSE DAWSTOWN, BLARNEY CO. CORK	150+ COWS	486
MICHAEL HYDE	KILLEENS, COMMONS ROAD, CORK	150+ COWS	354
LIAM BURKE	BARNA, INNISHANNON, CO. CORK	150+ COWS	328
DAN O'SULLIVAN	BELLMOUNT, CROOKSTOWN, CO. CORK	80-150 COWS	363
NICHOLAS FLAVIN	CLASHADONNA, YOUGHAL, CO. CORK	80-150 COWS	247
LIAM DELAHUNTY	RAHEENLEIGH, CULLOHILL, PORTLAOISE, CO. LAOIS	80-150 COWS	242
MICHAEL FLYNN	KNOCKALAVALLA, CARRICK ON SUIR, CO WATERFORD	<80 COWS	242
DONAL DINEEN	DERRY, BERRINGS CO. CORK	<80 COWS	204
JAMES LENIHAN	BALLINVARISCAL, CASTLEISLAND, CO. KERRY	<80 COWS	182

Top Bulls & Breeders

Code	Bull Name	Breeder	Address	EBI	Rel	Dtrs	Sire
GVV	GREENVALLEY HARVEY	CHRIS KENNEALLY	MOGEELY CURRAGLASS MALLOW CO CORK	€202	70	58	TIH
JRU	JOHARRA RUUD	JOHN DONOHOE	MEAUGH FERNS ENNISCORTHY CO WEXFORD	€190	76	138	RUU
BYH	BALLYBRIDE SHERRY DANO	PATRICK O'LEARY	BALLYBRIDE UPPER CONNA MALLOW CO CORK	€177	67	78	HZO
BHZ	BALLYBROOK ASHLING JUSTICE	MAUREEN HORAN	BALLYDEAGUE BALLYHOOLEY CO CORK	€174	70	72	OJI
WLO	MILEWATER LEO	KEVIN KELLEHER	LONGSTONE COTTAGE WHITECHURCH CO CORK	€162	68	79	TIH
LTW	LEETOWN RAY	MARGARET BURKE	VICARSTOWN CORK CO CORK	€155	75	65	RUU
				€177	71	82	