



IRISH CATTLE BREEDING FEDERATION

HerdPlus / G€N€ IRELAND Breeding Day

Corrin Mart, December 7th 2012.

Sponsored by: **F|B|D** Trust



IRISH CATTLE BREEDING FEDERATION

Morning	ICBF HerdPlus [®] & G€N€ IRELAND [®] User Event, sponsored by FBD Trust
10.35	Welcome – Martin Burke (Chair).
	<u>Session 1: Research results.</u>
10.45	Genomics – Francis Kearney
10.55	G€N€ IRELAND [®] Next Generation Herds- Sinead McParland
11.05	Dairy genetic evaluations – New Fertility Update - Ross Evans
11.15	General discussion
	<u>Session 2: Services for 2012.</u>
11.30	G€NOMICS New LD Chip for females – New Service – Andrew Cromie
11.50	ICBF involvement in BVD Scheme Roll-out – Sean Coughlan
12.00	HerdPlus [®] – What's New - Kevin Downing
12.15	General Discussion
	<u>Session 3: New 2012 Discussion Group Competition & Breeder Awards</u>
12.30	New Discussion Group Project Competition – John Donworth, George Ramsbottom
12.45	FBD G€N€ IRELAND [®] Bull Breeder & Data Recording Awards– Andrew Cromie
1.00	Lunch



IRISH CATTLE BREEDING FEDERATION

Genomics Update

Genomics

- Has revolutionised dairy cattle breeding
- Estimate EBI for a young bull based on a DNA profile
- Combine DNA & parentage information to generate a higher reliability EBI
- A genomic EBI is equivalent to having 10-15 daughters milking

Genomics - Genetic Gain

Previous scenario

Year - 1	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
Cows Mated	Bull Calves Bought	100 Bulls enter G€N€ IRELAND	Daughters born	Daughters mated	Daughter calve/milk recorded	Bulls chosen for AI (10-20)

Genomic Selection scenario

Year - 1	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
Cows Mated	'000s Bulls screened	35-70 Bulls enter G€N€ IRELAND	Bulls chosen for AI	3 Years Advanced Gain		

Genomics – Genetic Gain

- In past waiting 10+ years to get high fertility & survival reliability
- With use of genomics we can get bigger daughter groups faster
 - higher reliability at a much younger age
- Only best quality proven bulls kept
- High quality GS & proven bulls to choose from

Genomics - Usage

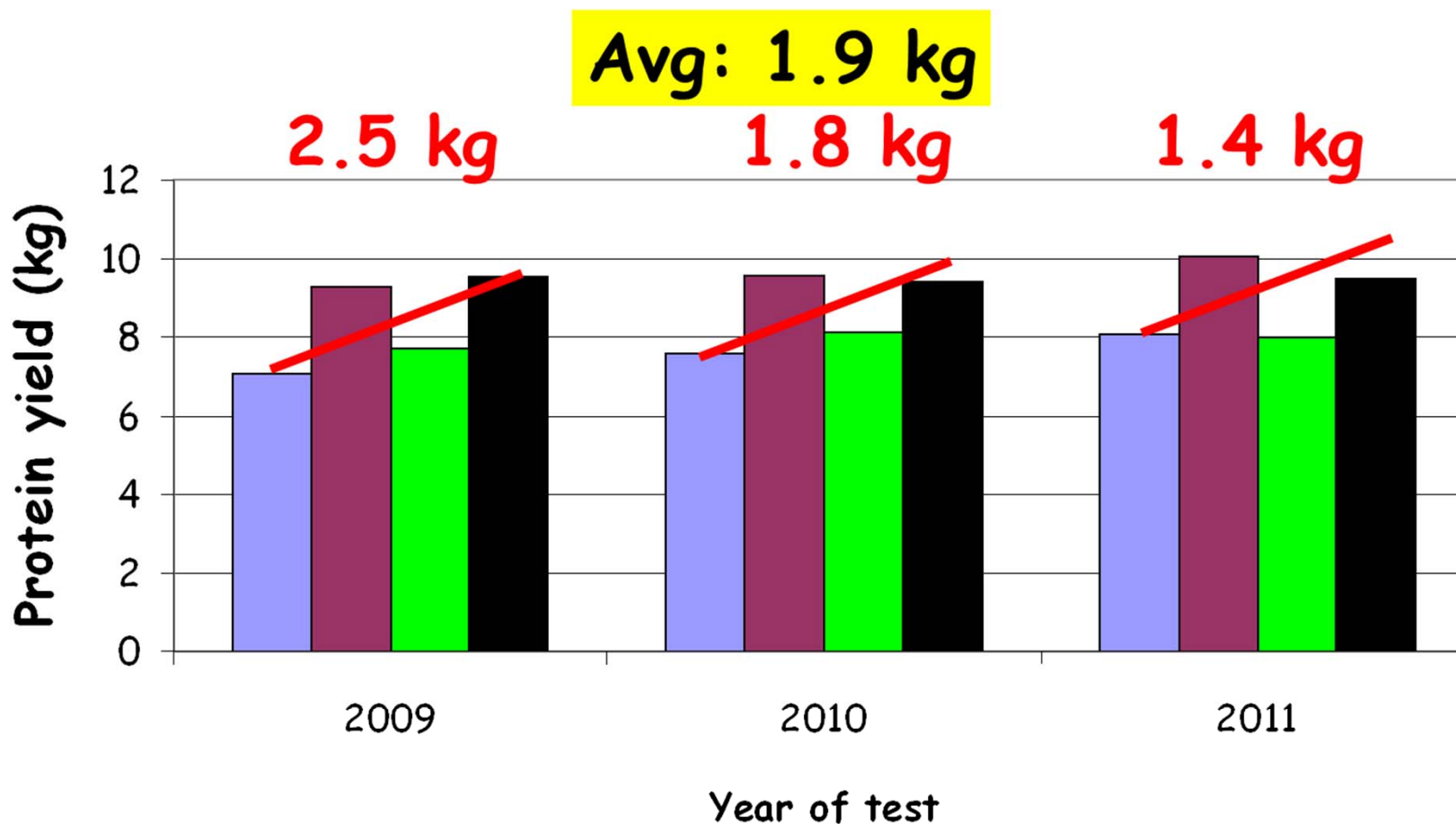
	2010			2011		
Proof	% Use	Bulls /hrd	EBI (Rel)	% Use	Bulls /hrd	EBI (Rel)
DP - IRL	25	3	146(76)	29	2.8	143(75)
DP - INT	34	3	155(47)	24	3.3	155(47)
GS	40	4	218(56)	47	5.1	218(57)

- Based on > 500k serves/year
- Usage of GS bulls has from 34% to 47% since 2009
- Farmers still using more GS bulls to spread their risk

Genomics – Results

- 142 bulls marketed on GS now with daughter proof
 - 35 in 2009, 39 in 2010, 68 in 2011
- Correlation between GS & DP > PA & DP
 - 10-20% greater depending on trait
 - Correlation of 60-80%
- Increasing across years
 - More animals in reference population
- In-line with results from other countries

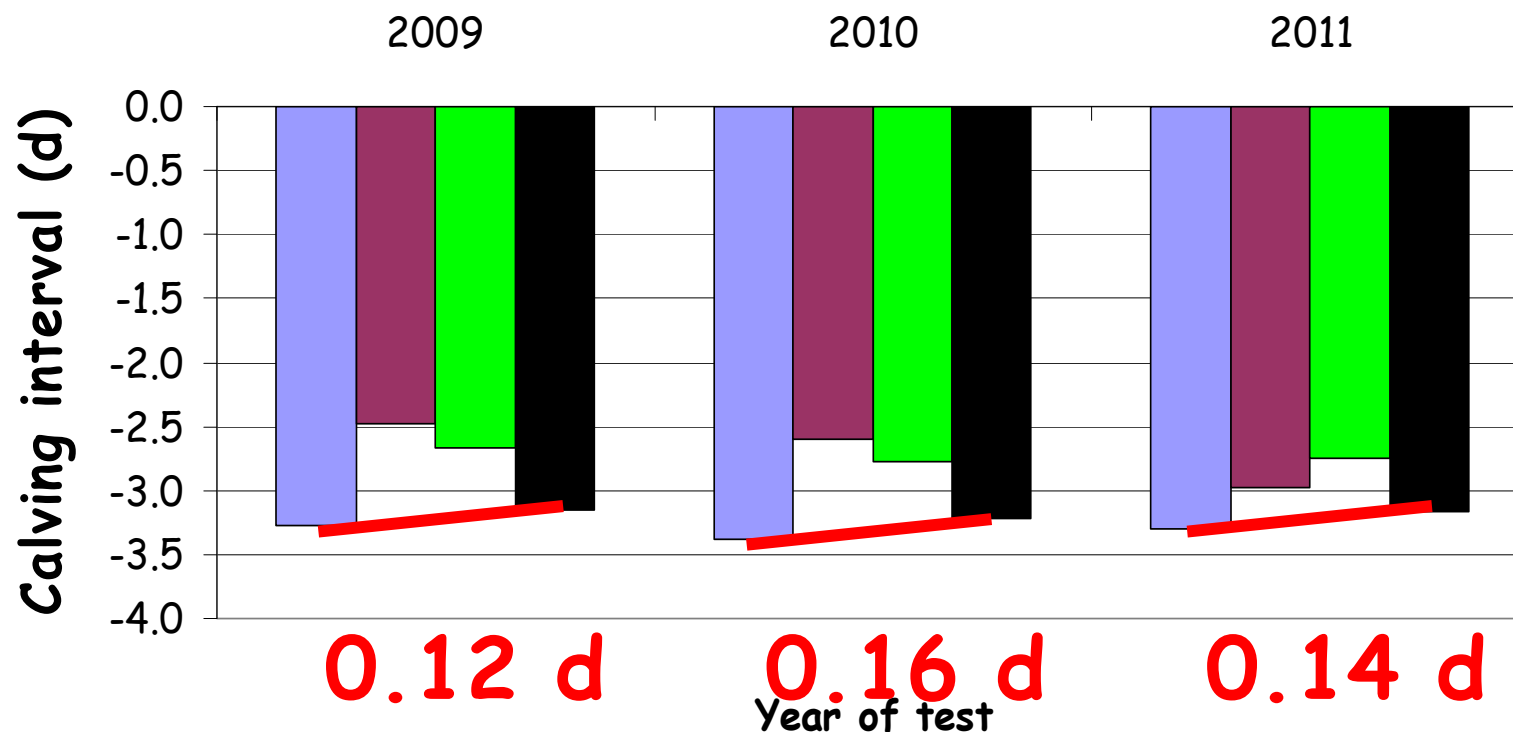
Genomics - Results



Progeny test
 Parental average
 Direct genomic value
 Blended genomic proof

Genomics - Results

Avg: +0.14 d



Genomics – Results

- Production
 - Milk 50kg, fat 1.7kg, protein 1.9kg
 - Overestimate of €9
 - This will be subtracted from Milk SI for all genotyped animals
- Fertility
 - Currently no evidence of bias – no adjustment required

Genomics – Future

- Moving from Bovine3k chip to BovineLD (~7k SNPs)
- Higher imputation accuracy
- Hol/Fr (and no greater 6.25% 3rd breed)
- Increases in reference population > higher reliability
- Research on genomics for other dairy breeds

Genomics - Summary

- Demand remains strong for GS bulls
- Results are in line with expectations
 - Correlations higher with GS than PA
 - Slight overestimation with production (also the case for PA)
- Providing a great platform to have high reliability EBIs in a much shorter time
- **CONTINUE TO USE A TEAM OF GS BULLS**
 - Individual proofs will change more than the team average
 - Spread usage of bulls **EQUALLY!!!**

Next Generation Herd

Sinead McParland & Frank Buckley

AGRIC, Teagasc Moorepark

What is the Next Generation Herd?

- Genetic gain increasing faster than ever before
 - Ensure we are going in the right direction
 - Remember the impact of selection for milk on fertility?
- Research herd of genetically elite, genetically diverse Holstein-Friesian cows
 - Represent the “next generation” of cows in the national herd
 - 15 year research project

Next Generation Herd - Objective

1. To ensure we are breeding cows compatible to Irish grass based production system
2. To facilitate the monitoring of difficult to measure traits
 - Cow health, greenhouse gas emissions, intake
 - Deleterious consequences of genetic selection?
3. To enhance the development of the EBI
 - Identify new traits
 - Identify new ways to routinely monitor traits

Herd Profile

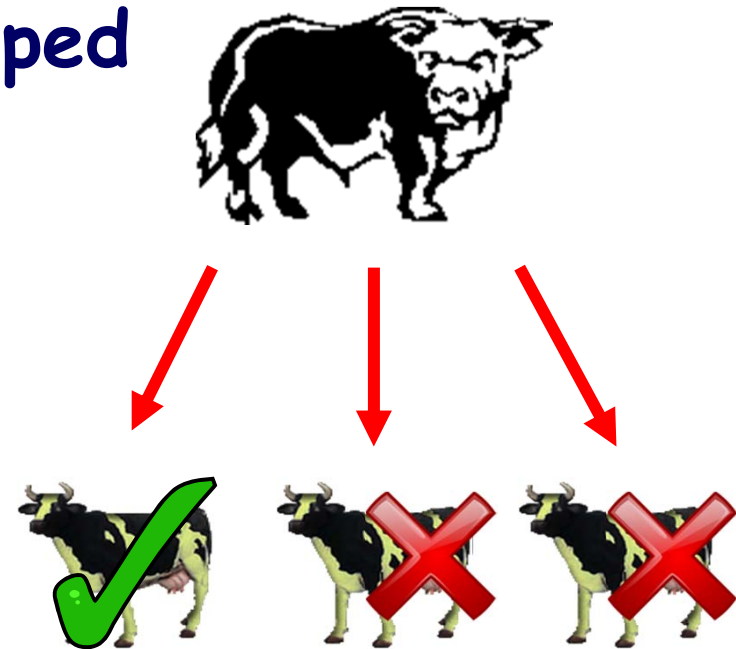
- Established herd : 140 (high) + 40 (average)
 - Disentangle genotype * environment effects
- High genetic merit animals
 - Top 3% in Ireland
 - Genetic diversity vs genetic merit
- Average genetic merit animals
 - National average EBI and performance

Herd establishment

- Herd establishment to begin early 2012
- Buy in 200 in-calf heifers & 60 maiden
- Animals of highest genetic merit available
 - Genetic diversity vs elite genetic merit!!
 - Genomically tested
 - Enhanced breeding value reliability
 - Get the “best” of the half-sibs

Initial heifer selection

- 700 heifers initially selected on genetic merit and genetic diversity
- Top heifers to be genotyped
- Purchase 200
 - Available for purchase
 - Highest genomic merit
 - Genetically diverse
 - 6/sire
 - 16/grandsire



Top 700 heifers

Variable	Mean	Min	Max
EBI	168	120	239
Milk	58	16	161
125 sires (max 30/sire) 206 grandsires (max 80/grandsire)			
Health	-1	-10	8
Maintenance	9	-9	35

Herd Replacements

- Replacement rate of 33%
 - Maintain maximal genetic gain
- 50% bought in
 - Identified from national herd
 - Expected genetic merit and diversity
- 50% bred within the herd
 - Sires selected according to genetic merit, diversity and compatibility to the herd

Animal Measurements



- **Milk Yield & Composition**
 - Fatty acids, proteins, Lactoferrin, minerals
- **Body traits**
 - Body weight, BCS, Energy Balance status
- **Reproductive efficiency**
 - Scanning, CLA, P4 conc post AI, IGF1, oestrus behaviour, ovulation failure, silent heats
- **Udder Health**
 - Routine sampling, genetics, bacteriology, immunology, immunogenetics, host and microbial genomics, proteomics, transcriptomics etc...
- **Feed Intake & Feed Efficiency**
 - Short term, lifetime... (N-alkane technique)
- **Environmental impact: GHG (SF6 technique)**

Conclusion

- Next generation herd will act as an important research resource
 - Continually track ahead of the EBI
 - Monitor “difficult to measure” traits
- Research results will feed back into enhancing the EBI
- Ensure long term sustainable genetic gain
- Benefit the Irish dairy industry



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New dairy fertility evaluations

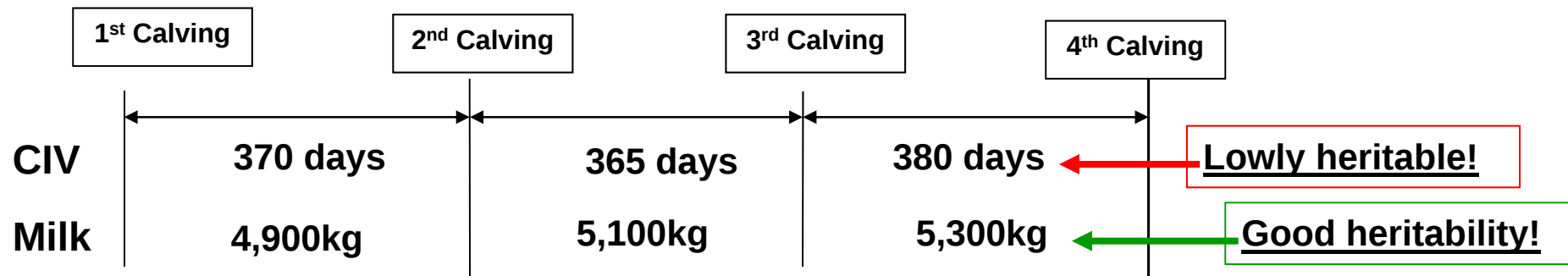
Updates reported previously

Research work finished

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

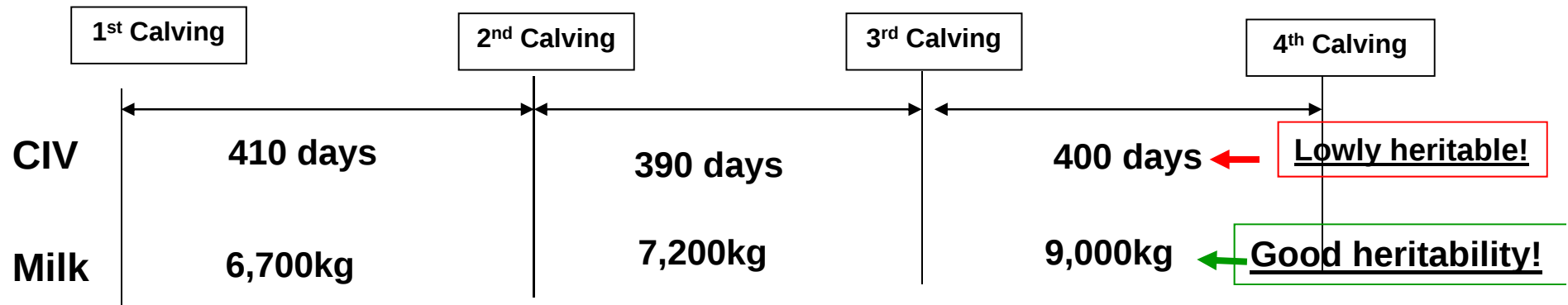


Cow A



Cow B

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





New Fertility evaluations

Cow A

	1 st Calving	2 nd Calving	3 rd Calving	4 th Calving	5 th Calving	6 th 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 insemin	1 insemin	2 insemin	1 insemin	1 insemin	



Cow B

	1 st Calving	2 nd Calving	3 rd Calving	4 th Calving	5 th 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 insemin	3 insemin	2 insemin	2 insemin	5 insemin



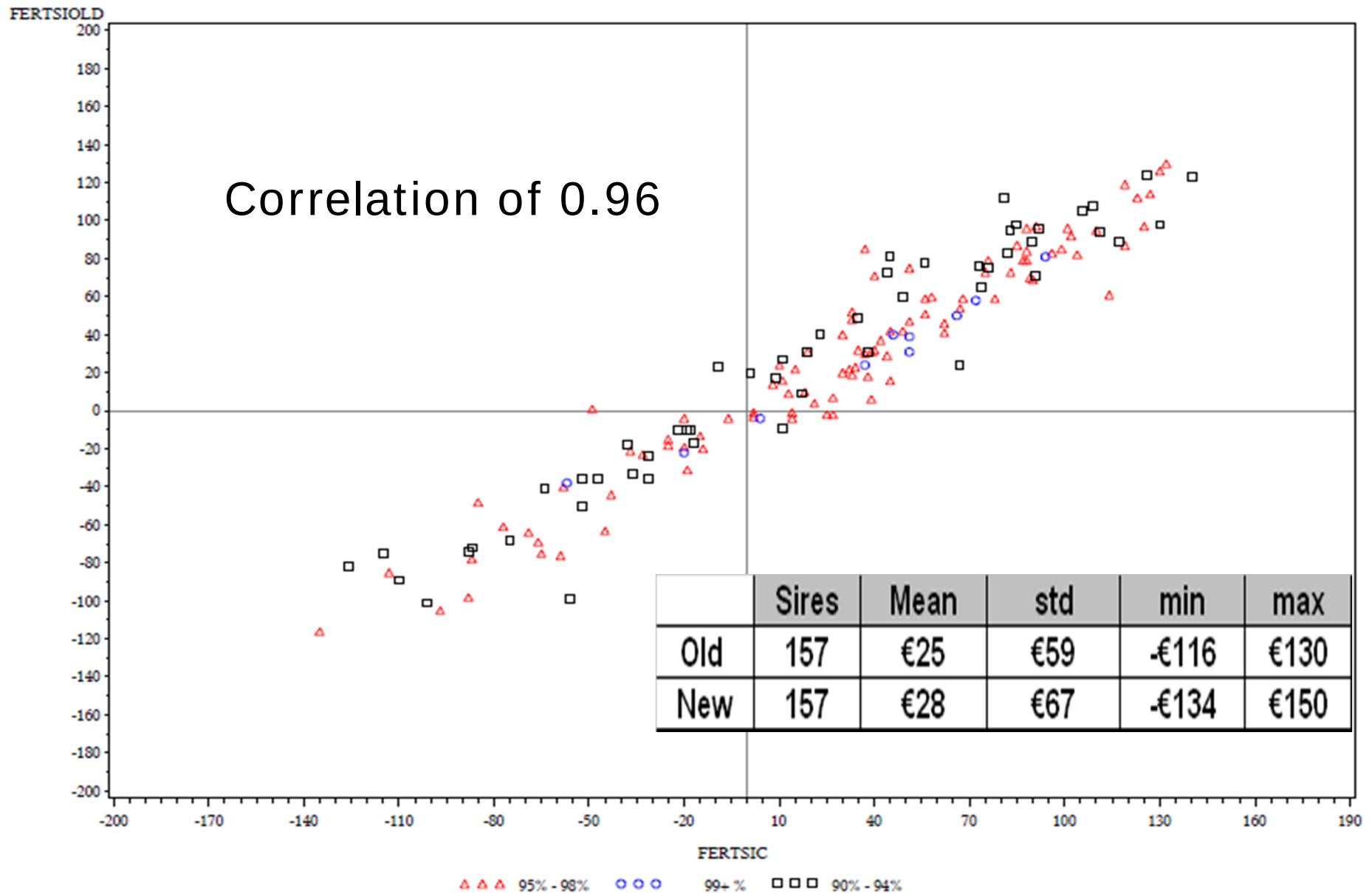
Negative link between milk and fertility is reduced with CFS and NS

Insemination traits are better biological predictors of calving interval

Other additional changes

- **Specific heterosis effects included**
 - E.g. FRxHO, HOxJE
- **250,000 extra cows with no milk recording but with fertility**
- **New software: reliabilities for cows**
- **Age at first calving evaluated**
- **1.6 million animals on 13 traits to
1.98 million cows on 23 traits**

Ai sires > 90% reliability



Movement in sire proofs

Reliability category	Num sires	min diff FERTSI	avg diff FERTSI	max diff FERTSI
99+ %	10	-€22	€9	€22
90% - 94%	150	-€57	€3	€68
75% - 90%	467	-€77	€2	€84
60% - 75%	716	-€101	€1	€92

- AI sires in the high reliability categories are affected by extra data on existing cows
- AI sires in the lower reliability categories are more affected by the changed relationship between milk and fertility

Breed effects using AI sires with 50% reliability on new indexes

Breed	No of sires	Fertility SI old	Fertility SI new	Difference in Index	std FERT SI old	std FERT SI new
FR	403	€83	€88	€5	€34	€39
HO	1769	-€1	-€1	€0	€56	€61
JE	43	€93	€78	-€15	€36	€34
MO	62	€71	€71	€0	€34	€36
NR	20	€80	€121	€41	€17	€27

- Rise for FR, MO and Scandinavian Breeds
- Reduction in JE sires

Calving interval heterosis		
FRxHO	HOxJE	HFxSB
-2.81	-4.25	-2.98



Heterosis is non-additive

EBI measures additive genetic merit

Effect on Top EBI cow list

Top cow listings	Old list	New list	cows new to the list	cows off the list
Ayrshire		1	1	
Friesian	255	416	310	149
Holstein	1,199	1,313	937	823
Jersey	522	148	50	424
Montbeliarde	5	18	16	3
MRI	4			4
Norewegian Red	7	68	64	3
Red Danish		2	2	
Simmental	3			3
Red and White		2	2	
Swedish Red	5	30	25	
Other		2	2	
TOTAL	2000	2000		

Increased entry criteria
€168 to €186

parity	Old List	% of old list	New List	% of new list
1	524	26.2%	124	6.2%
2	413	20.7%	180	9.0%
3	315	15.8%	233	11.7%
4	280	14.0%	236	11.8%
5	183	9.2%	192	9.6%
6	108	5.4%	180	9.0%
7	62	3.1%	230	11.5%
8	54	2.7%	207	10.4%
9	34	1.7%	186	9.3%
10	12	0.6%	119	6.0%
11	10	0.5%	67	3.4%
12	1	0.1%	26	1.3%
13	4	0.2%	12	0.6%
14			5	
15			3	

More older cows
Rewarding performance

Status

- New evaluation passed the INTERBULL test run (international) in September
- Implementation in December 2011
- Proofs for AI sires, cow profiles live on 12th December
 - EBI reports in new year



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Genotyping Females.

5th December 2011.



Background.

- Launched in 2009 based on young AI sires.
- Early results are “stacking up” well.
 - High correlations & acceptable bias.
- Service for males launched in 2011.
 - €50 (including VAT).
- Extending to females in 2012.
 - Research project @ €30/female, based on all cohorts approach.
 - Evidence of benefits from GEN€ IRELAND bull breeder herd project.
- ICBF keen to encourage uptake in service.

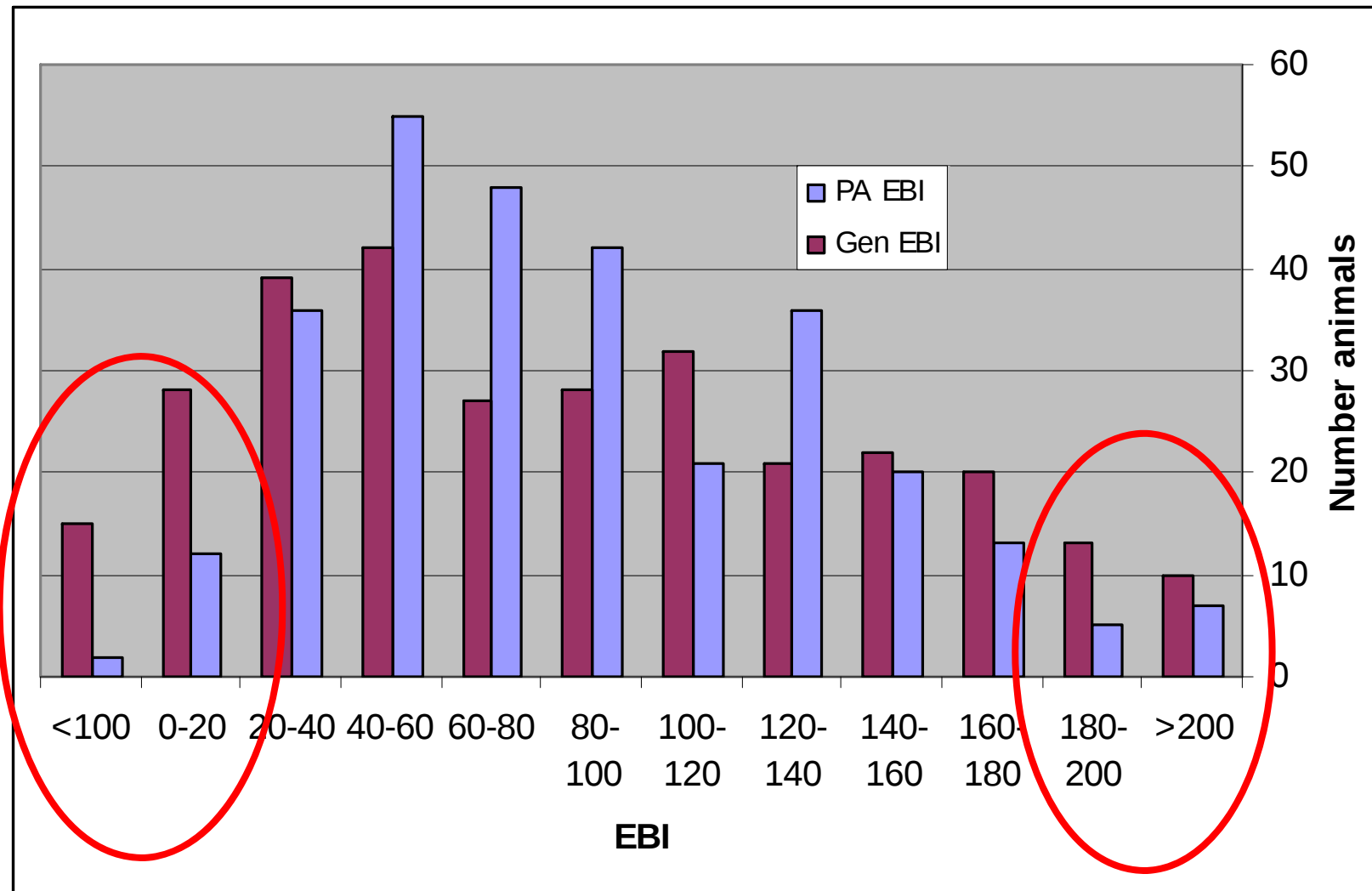
5 Bull Breeder Herds

Parent Average vs Genomics.

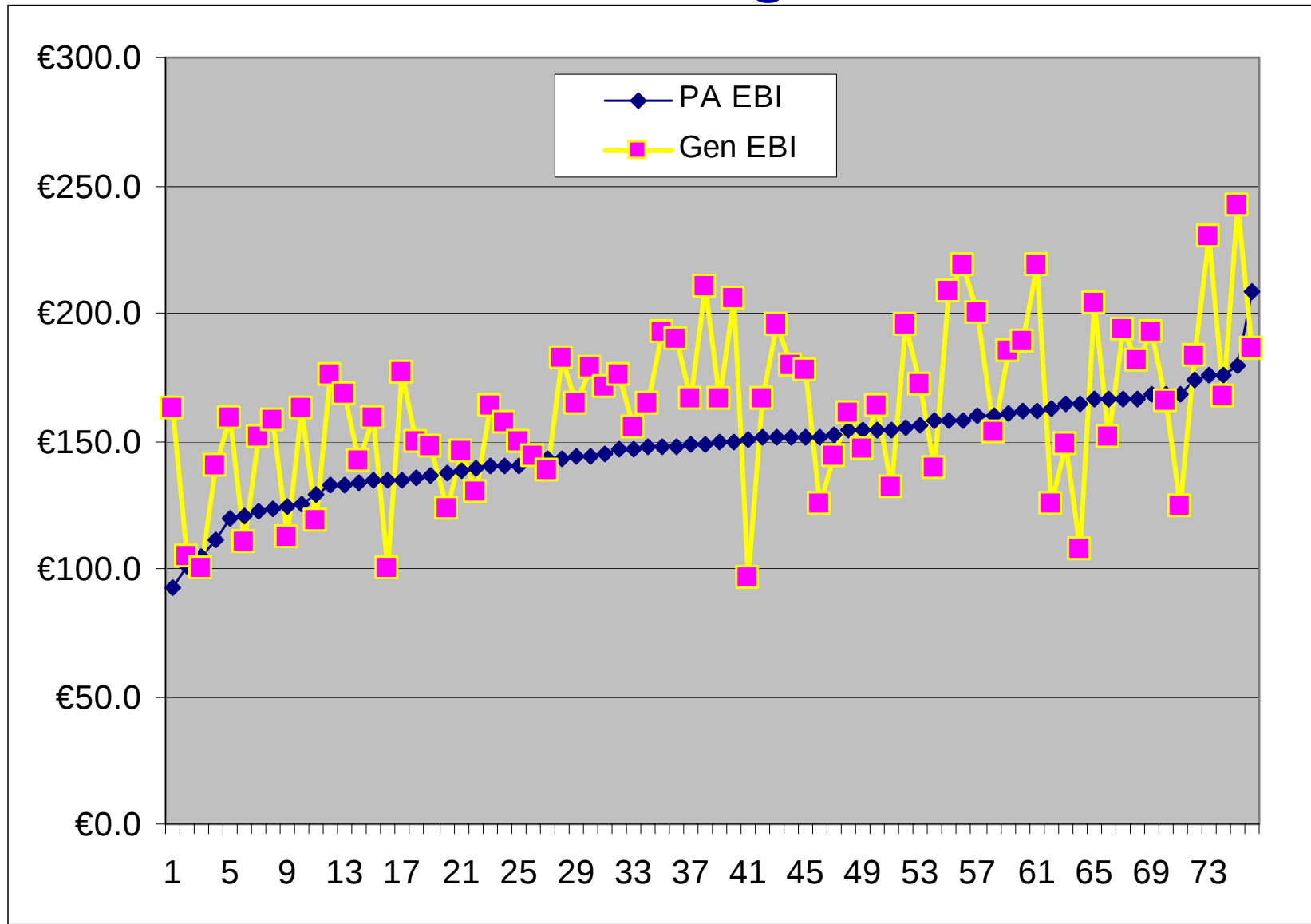
Data	Herd A	Herd B	Herd C	Herd D	Herd E	ALL
Count of Animals	76	48	15	133	25	297
Parent Average EBI	€147.6	€122.5	€122.3	€83.6	€146.6	€113.5
PA EBI Reliability	30.5	32.2	32.7	32.6	34.5	32.2
Max PA EBI	€208.1	€197.3	€184.6	€187.0	€209.4	€209.4
Min PA EBI	€92.5	€85.6	€62.9	-€56.3	€79.4	-€56.3
Genomic EBI	€162.3	€126.8	€108.3	€78.4	€137.7	€114.2
Gen EBI Reliability	48.9	55.0	50.1	58.5	56.6	54.9
Max Gen EBI	€242	€233	€171	€247	€204	€247
Min Gen EBI	€96	€34	€34	-€83	€41	-€83
Difference EBI	€14.7	€4.3	-€13.9	-€5.2	-€8.8	€0.7
Diff EBI Reliability	18.5	22.9	17.3	25.9	22.1	22.7

- Average EBI stays the same (some up & some down).
- **Range** in EBI will increase (greater max & mins).
- **23%** increase in reliability. Equivalent to 14 progeny

Genomics will help identify “extremes”



Example herd. There will be re-ranking.



Selecting female replacements on Parent Average EBI (TOP 2/3rds picked)

Sel. Pool ↓	Herd	Gen EBI in agreement.	Gen EBI not in agreement.	Total	% wrong selections
76	Herd A	39	11	50	22%
48	Herd B	27	5	32	16%
15	Herd C	7	3	10	30%
133	Herd D	75	13	88	15%
25	Herd E	14	2	16	13%
297	ALL	162	34	196	17%

- On average 17% of heifers that you retained based on parent average EBI, should have been sold, based on genomic data.
- Varies for individual herds.

Taking the 297 replacements (from the 5 herds)
example - Can we “quantify” this loss?

Select on PA EBI	Top 2/3	Bottom 1/3	Average
Count of animals	196	101	297
Parent Average EBI	€132.8	€76.2	€113.5
Genomic EBI	€133.9	€76.1	€114.2
Select on Gen EBI	Top 2/3	Bottom 1/3	Average
Count of animals	196	101	297
Parent Average EBI	€127.3	€86.8	€113.5
Genomic EBI	€141.6	€61.1	€114.2

- Difference in EBI between selecting heifer replacements based on genomics versus parent average = (€141.6 - €133.9 = €7.7)
- €7.7 * 2 (all genes) * 4.5 lactations = €69.3

Are there other benefits to genotyping (i)?

- Identifying elite animals for breeding program.
 - Cows can change by $\pm$ €80.
 - The more cows you genotype, the greater the likelihood of finding extremes.
 - Equivalent to $\text{€} + \text{€}1500/\text{female} = \text{€}15$ (100 cows).
- Culling cows.
 - Similar principle to selecting female replacements.
 - 10% cows for “voluntary sale”.
Equivalent to 0.5% culling = 0.10

Are there other benefits to genotyping (ii)?

- Parentage verification.
 - Can be 5 ~10% error rates in calf pedigrees.
 - Cost of €1per 1% error=€5 - 10/animal.
 - Genomics will help; (i) identify parentage errors and (ii) allocate correct sire & dams to calves (*future*).
- Major genes & gene areas.
 - CVM,BLAD etc – can customise chip to Irish needs.

Genomics & other dairy breeds.

- Genomic EBI's only available for HF cows.
- Lack of AI sires for JE & Red breeds with EBI evaluations, is major obstacle (~200 bulls – need 1000).
- Option to consider cow records (4 cows=1 bull equivalent).
 - ~10k JE cross & 3k NR cross cows on farms.
- Can we work with these herd-owners to;
(i) develop genomic EBI's?
- Large potential value for these herd-owners.

New Female Genotype service

- ICBF today launching a “research project” to encourage genotyping of females (on whole herd basis).
- New 7K Low Density chip from Illumina released November 2012
- 7K Genotypes qualified “locally” in Weatherbys December 2012

Cost:benefit

- Cost of €30 per (including VAT).
- Benefit of;
 - €70 from breeding replacements.
 - €15 from culling.
 - €15 from parentage identification.
 - €20 from bull mothers.
- Total of €120 = 4:1 return on investment.
- Doesn't include other benefits, e.g., long term industry good.

Options	Description
OPTION 1	<u>ALL YOUNG STOCK</u> All Dairy Replacements (2010 & 2011 born heifers)
OPTION 2	<u>All 2010</u> born heifers only
OPTION 3	<u>All 2011</u> born heifers only
OPTION 4	<u>Cows & Young Stock</u> All Dairy Females in Herd (Cows & Heifers)
OPTION 5	2010 and/or 2011 born heifers and selected COWS
Call 1850 600 900 for further inquiries.	
Please return form to HerdPlus/Genomics Service, ICBF, Highfield House, Bandon, Co. Cork	

Options for farmers.

Conditions:

- Service is available now for Holstein Friesian and Pure Friesian females.
- Young stock cannot be $>6.25\%$ of a third breed (other than Holstein/Friesian)
- Pure FR can only be done on the new 7K Low Density chip if sire is already genotyped (on 54k).
- Cows from other dairy breeds can be sampled for later genotyping; specific letters for Cross Bred target herds in next 3 weeks - results later in 2012.

Summary.

- Genomics is revolutionising cattle breeding.
- Very attractive package being offered by ICBF to farmers.
- Strongly encourage you to consider (4:1 return on investment).
- Opportunity to invest positively in your farm business in 2012+
- Since Fri 02/12 there some 55 farmers already signed up – so don't miss out !!
- So see Mary outside !!



IRISH CATTLE BREEDING FEDERATION

ICBF's Involvement in the BVD Eradication Scheme

7th December, 2011



How come ICBF is involved in the AHI initiatives?

- Breeding can play a key role to play in managing disease on a long term basis
- ICBF have are very interested in the genetics of disease resistance
- No wish re-invent the wheel
 - The IT infrastructure required to support these initiatives already exists
 - Has been already paid for by Farmers (tags, service providers) and by DAFF
- Ethos of ICBF lines up well with AHI
 - Non-profit
 - Industry owned and run

BVD Eradication Scheme

- Currently around 50,000 tags ordered
- Around 800 herds signed up to date
- 60% of herds are dairy
- 25% of herds are pedigree registering
- 60% of herds are on HerdPlus

BVD Eradication Scheme

- Lab Results transferred to ICBF
- ICBF communicate results to farmer
 - SMS (for all results)
 - Paper (for Virus Positive/Inconclusive/Empties)
 - Web (for all)
- Also available to
 - Vets (when authorised by the farmer)
 - DAFF (as a route to the marts)
 - Marts (for display boards)

IE2210872
Dairy HerdPlus - Profit through Science

HERD INFO

RECORD EVENTS

CALVING

FERTILITY

REPORTS

STOCK REPORTS

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Irish Cattle Breeding Federation (ICBF)

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Irish Cattle Breeding Federation (ICBF)

Timely Tips from Animal Health Ireland on the correct procedures to be followed when drying off cows - see link below.

Drying Off Cows.pdf
www.icbf.com

CATALOGUE

INFO

DEP

EBI / GENOMICS

DAIRY SIRE ADVICE

INBREEDING

GENE IRELAND

MILK RECORDING

AHI ANIMAL HEALTH

HerdPlus BEEF Page >>



ICBF Bull Search

Search by:

- ☐ Ai Code, Tag, Herd Book No, ITT
☐ Name or part of name

Search

[Active Bull Lists](#)

National BVD Programme - Results Declaration

Dafftest Dafftest

IEDAFFTEST

The following animals from this herd have tested NEGATIVE for BVD virus.

Tag number	Date of Birth	Sex	Lab Reference	Testing Lab	Test Date
IE999999900010	01/01/85	M	B01091100001	Advanced Micro Services	08/09/11
IE999999900010	01/01/85	M	GV11-040942	Identigen Ltd	06/09/11
IE999999900010	01/01/85	M	05/09/11-39-1	Animal Health Laboratories	02/09/11
IE999999900010	01/01/85	M	2011-016073	Agri-Food And Biosciences Inst	02/09/11
IE999999900010	01/01/85	M	11Z16835	Irish Equine Centre	02/09/11
IE999999900010	01/01/85	M	EN0109110031	Enfer Diagnostics	01/09/11
IE999999900013	01/01/85	M	B01091100004	Advanced Micro Services	08/09/11
IE999999900013	01/01/85	M	GV11-040946	Identigen Ltd	06/09/11
IE999999900013	01/01/85	M	11Z16838	Irish Equine Centre	02/09/11
IE999999900013	01/01/85	M	2011-016073	Agri-Food And Biosciences Inst	02/09/11
IE999999900013	01/01/85	M	05/09/11-39-4	Animal Health Laboratories	02/09/11
IE999999900013	01/01/85	M	EN0109110034	Enfer Diagnostics	01/09/11

These results are based on records received to the ICBF database. ICBF does not take responsibility for the accuracy of the results. This document has been generated from the ICBF database on 15:23:12 13/09/2011

Health Results will follow the animal

- In a similar manner to Ancestry, Milk Recording Data, EBI, etc, the BVD testing results for an animal will go with the animal when it moves from one herd to another

Old Results

- AHI are looking at options around allowing the entry of historical results to the database
- We will be taking guidance from AHI as to how those are entered, in order to maintain the integrity of the results
- They won't count towards the '3 year' testing requirement of the current programme



IRISH CATTLE BREEDING FEDERATION

Questions?





IRISH CATTLE BREEDING FEDERATION

New Herdplus Developments

Kevin Downing



HerdPlus® Developments

- HerdPlus Overview
- Security & Data Privacy
- Dairy Efficiency Programme
- Teagasc e-Profit Monitor
- Weight Recording Service

HerdPlus® Overview

■ Current Membership;

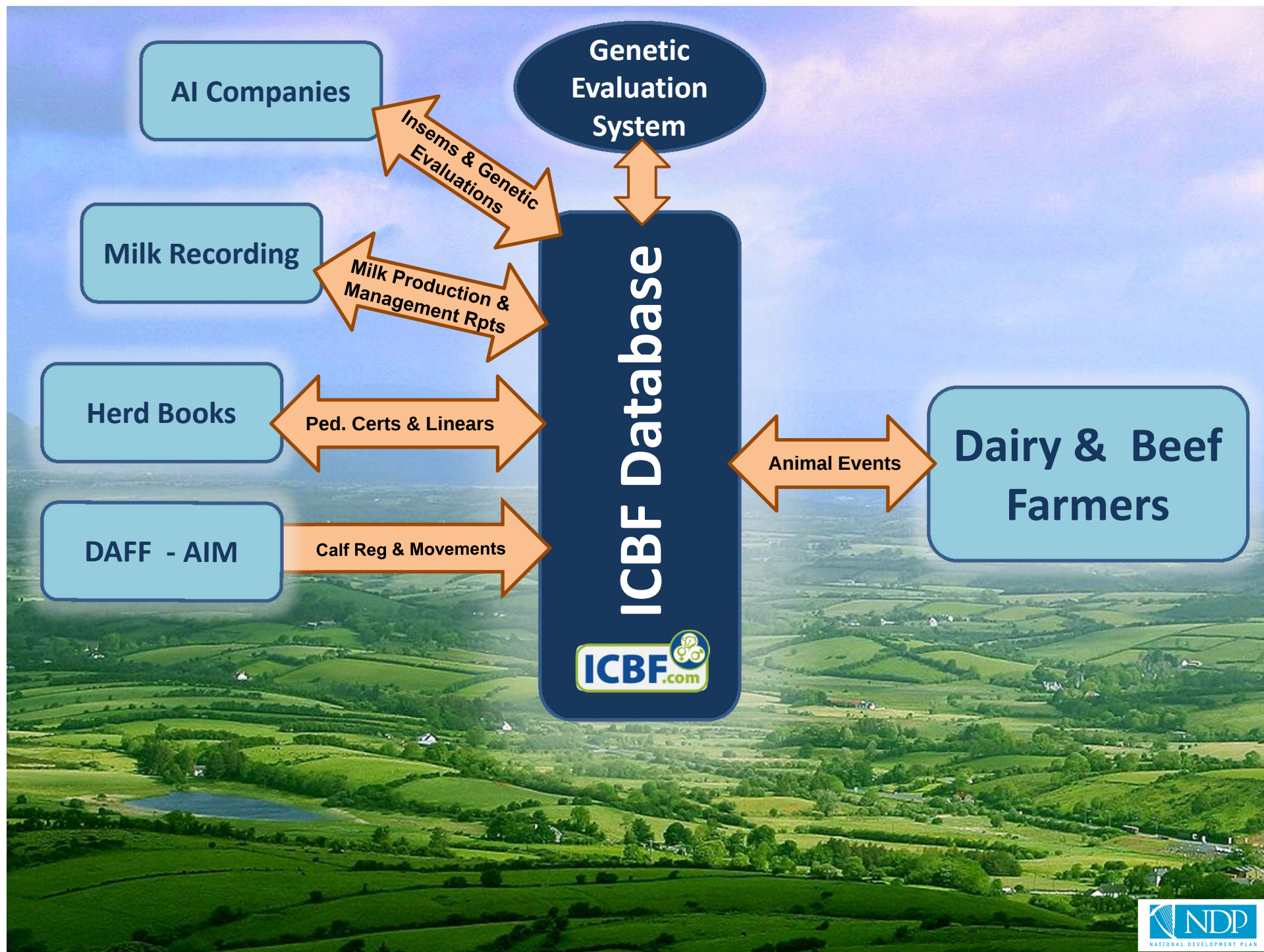
HERDPLUS ON 06-DEC-2011	HerdPlus Service				
	Paper		Electronic		Total
DAIRY	836	15%	4,579	85%	5,415
BEEF	316	9%	3,221	91%	3,537
TOTAL	1,152		7,800		8,952

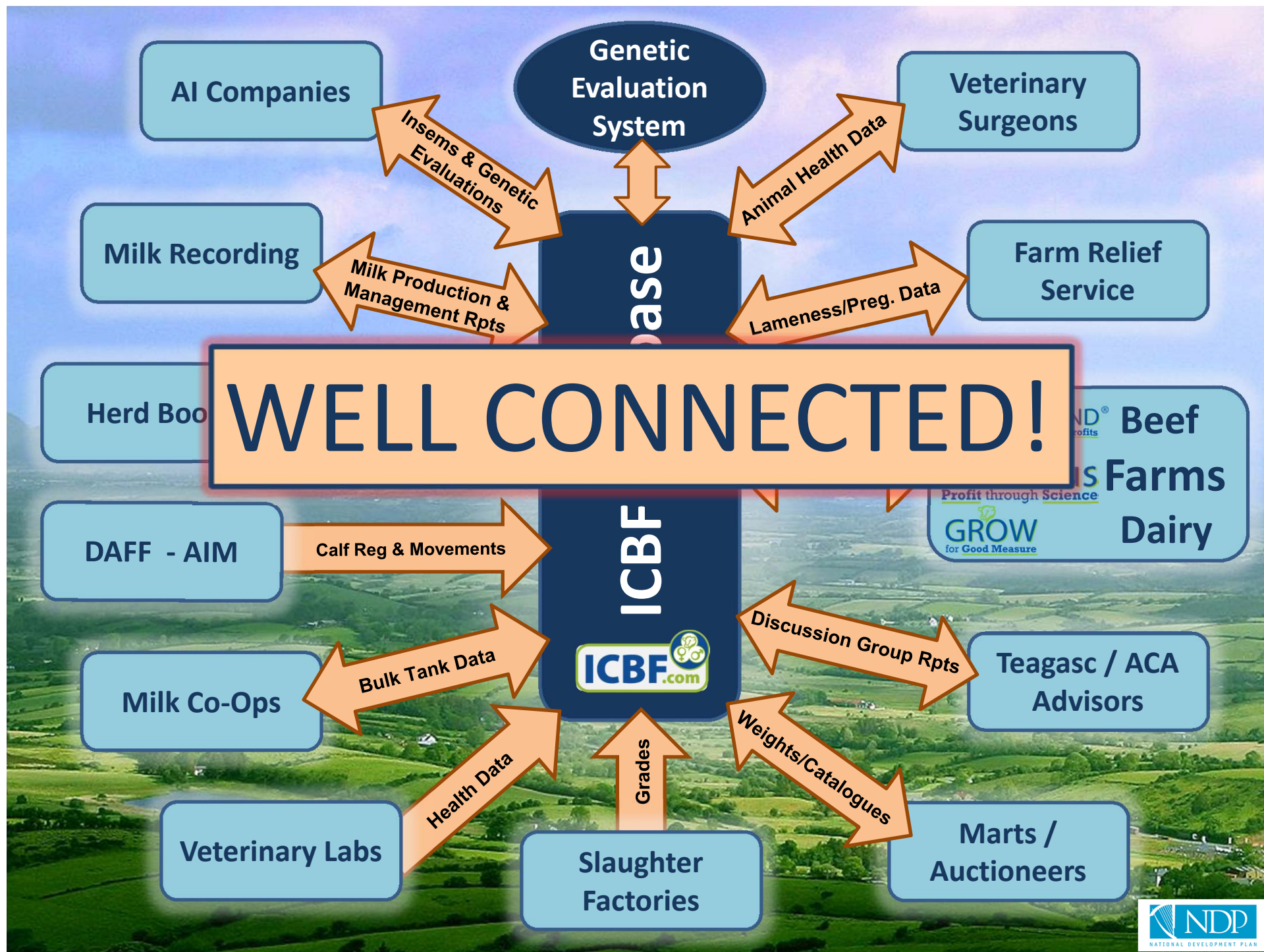
■ Direct Debit switching offer - €10 off

HerdPlus® Dairy Offering

- EBI Reports
- Dairy Cow Report
- Sire Advice & Breeding Chart
- Calving & Fertility Reports
- Nitrates & Stock Reports
- Herd Catalogues
- Pocket Notebook
- 5 Year Trend Report
- On-Line Herd Profiles
- Milk Quality Report
- Discussion Group Rpts.

ALL FOR €60 PER YEAR





HerdPlus® Overview

- HerdPlus Growth through Industry Partners

Partner	Opportunities
Teagasc	Agri. Colleges
ACA	Stock Reports, DEP & SCWS
HerdBooks	Pedigree Beef Breeder Clubs
AHI / Vets	BVD, CellCheck, Fertility
Milk processors	Co-op Performance Reports & Daily Bulk data
Marts	Catalogues & e-Displays
Others	Bord Bia, ASA, Cork CoCo, UCD, etc.

HerdPlus® Developments

- HerdPlus Overview
- Security & Data Privacy
- Dairy Efficiency Programme
- Teagasc e-Profit Monitor
- Weight Recording Service

Security & Data Privacy


ICBF Web Application
Logged in as

[HOME - HerdPlus](#)
[CONTACT SUPPORT](#)
[LOG OUT](#)

Dairy HerdPlus - Profit through Science

 **HERD INFO**

 RECORD EVENTS

 CALVING

 FERTILITY

 REPORTS

 STOCK REPORTS

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 **Irish Cattle Breeding Federation (ICBF)**
 Dairy Farmers have responded well to the over-quota situation as can be seen in the latest CSO stats - Milk deliveries back 12.7% in October.
Milk Statistics - October 2011
www.icbf.com
 277 People Reached

 EBI / GENOMICS

 DAIRY SIRE ADVICE

 INBREEDING

 GENE IRELAND

 MILK RECORDING

 AHI ANIMAL HEALTH

HerdPlus BEEF Page >>
 Today, Monday

ICBF Bull Search
 Search by:
☒ Ai Code, Tag, Herd Book No, ITT
☐ Name or part of name

[Active Bull Lists](#)

 CATALOGUE

 e-PM

 DEP

Security & Data Privacy

■ Password & Data Permissions

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](#)

Herd Details	
Identifier	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

Security & Data Privacy

■ Current Herd Data Permissions

- 10 categories of service provider to choose from

Edit Authorisations

Select an organisation/person from the left and configure how much of your data they can access on the right. Printable statement [here](#).

- ☒ **AI Services** ✓
- ☐ Agricultural Consultant
- ☐ Auctioneer
- ☐ Fertility Services
- ☐ Food Consultants
- ☒ **Herdbook Services** ✓
- ☐ Mart
- ☒ **Milk Recording Services** ✓
- ☒ **Teagasc Advisory** ✓
- ☐ Veterinary Service

Current Authorisations

AI Services	Munster A.I. and Farm Services Group
Herdbook Services	Irish Holstein/Friesian Assoc.
Milk Recording Services	Munster Milk Recording
Teagasc Advisory	Teagasc Advisory

Security & Data Privacy

- How to allow my Vet access to my data?
 - Click on the + to expand the list

Edit Authorisations

Select an organisation/person from the left and configure how much of your data they can access on the right. Printable statement [here](#).

☒ AI Services ✓ ☐ Agricultural Consultant ☐ Auctioneer ☐ Fertility Services ☐ Food Consultants ☒ Herdbook Services ✓ ☐ Mart ☒ Milk Recording Services ✓ ☒ Teagasc Advisory ✓ ☒ Veterinary Service	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #f2f2f2;"> <th colspan="2">Current Authorisations</th> </tr> </thead> <tbody> <tr> <td style="width: 35%;">AI Services</td> <td>Munster A.I. and Farm Services Group</td> </tr> <tr> <td>Herdbook Services</td> <td>Irish Holstein/Friesian Assoc.</td> </tr> <tr> <td>Milk Recording Services</td> <td>Munster Milk Recording</td> </tr> <tr> <td>Teagasc Advisory</td> <td>Teagasc Advisory</td> </tr> </tbody> </table>	Current Authorisations		AI Services	Munster A.I. and Farm Services Group	Herdbook Services	Irish Holstein/Friesian Assoc.	Milk Recording Services	Munster Milk Recording	Teagasc Advisory	Teagasc Advisory
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Teagasc Advisory	Teagasc Advisory										

Security & Data Privacy

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- ☒ **Herdbook Services** ✓
- ☐ Mart
- ☒ **Milk Recording Services** ✓
- ☒ **Teagasc Advisory** ✓
- ☐ Veterinary Service
 - [A E BRENNAN PVP PRACTICE](#)
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 - [AARDVELD VET PVP PRACTICE](#)
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 - [ABBEY VET CENTRE PVP PRACTICE](#)
 - [ABBEY VET CLINIC PVP PRACTICE](#)
 - [ADC Solutions](#)
 - [ADRIAN HANLEY PVP PRACTICE](#)
 - [ADRIAN HANLY PVP](#)
 - [AIDAN FINNAN PVP PRACTICE](#)
 - [ALAN FERGUSON PVP PRACTICE](#)
 - [ALEX HAMILTON PVP PRACTICE](#)
 - [ANDREW BROWN PVP PRACTICE](#)

Current Authorisations	
AI Services	Munster A.I.
Herdbook Services	Irish Holsteir
Milk Recording Services	Munster Milk
Teagasc Advisory	Teagasc Adv

- Click on your Vet from the drop-down list of names

Security & Data Privacy

Edit Authorisations

Select an organisation/person from the left and configure how much of your data they can access on the right. Printable statement [here](#).

- ☒ **AI Services** ✓
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 - [ADC Solutions](#)
 - [ADRIAN HANLEY PVP PRACTICE](#)
 - [ADRIAN HANLY PVP](#)
 - [AIDAN FINNAN PVP PRACTICE](#)

Organisation:	ADC Solutions
Organisation Type:	Veterinary Service
Access:	This organisation does not have access to any

Grant Access

Security & Data Privacy

- Vet now has access to view/edit data

Edit Authorisations

Select an organisation/person from the left and configure how much of your data they can access on the right. Printable statement [here](#).

☒ AI Services ✓ ☐ Agricultural Consultant ☐ Auctioneer ☐ Fertility Services ☐ Food Consultants ☒ Herdbook Services ✓ ☐ Mart ☒ Milk Recording Services ✓ ☒ Teagasc Advisory ✓ ☒ Veterinary Service ✓	Current Authorisations	
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	Veterinary Service	ADC Solutions

HerdPlus® Developments

- HerdPlus Overview
- Security & Data Privacy
- Dairy Efficiency Programme
- Teagasc e-Profit Monitor
- Weight Recording Service

Dairy Efficiency Programme

- Record Milking temperament, Mastitis, Lameness

ICBF Web Application Logged in a

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Dairy HerdPlus - Profit through Science

HerdPlus BEEF Page >>

HERD INFO

RECORD EVENTS

CALVING

FERTILITY

REPORTS

STOCK REPORTS

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Irish Cattle Breeding Federation (ICBF)

Dairy Farmers have responded well to the over-quota situation as can be seen in the latest CSO stats - Milk deliveries back 12.7% in October.

Milk Statistics - October 2011
www.icbf.com

277 People Reached

EBI / GENOMICS

DAIRY SIRE ADVICE

INBREEDING

GENE IRELAND

MILK RECORDING

AHI ANIMAL HEALTH

Today, Monday

ICBF Bull Search

Search by:

- Ai Code, Tag, Herd Book No, ITT
- Name or part of name

Search

[Active Bull Lists](#)

CATALOGUE

e-PM

DEP

Dairy Efficiency Programme

REQUIRED INFORMATION			HEALTH EVENTS		Dairy Efficiency Programme Rules and Forms Frequently Asked Questions
	% Complete			No. of Events Recorded	
Sire	100%	Record Sire	Mastitis	29 events	Record Event
Temperament	100%	Record Temperament	Lameness	31 events	Record Event

DAIRY COW SUMMARY

Listed below are cows currently in your herd or cows which calved since 01-Jan-11

Click Column Heading to sort by that attribute. Number of Animals Displayed : 139

[Reset](#)

								Show All	Show	
FB	Cow Tag	Death Date	EBI €	Lact.	Last Calving Date	Calf Tag(s)	Sire	Temperament	Mastitis Events	Lameness Events
467	IE151013740467		104	8	10-FEB-11	IE151013771427	BYJ	A	1	1
504	IE151013780504		79	9	02-MAR-11	IE151013761459	BYJ	VG	2	
550	IE151604920550		126	4	22-MAR-11	IE151013711479	BHZ	VG		
566	IE151013740566		96	6	05-OCT-10	IE151013761368	UPH	G	1	
568	IE151013760568		77	7	08-MAR-11	IE151013761467	PKK	G		1
569	IE151013770569		55	7	03-MAR-11	IE151013781460 IE151013791461	LLK	G	1	
590	IE151013740590		77	7	28-FEB-11	IE151013741457	BHZ	A	1	1
605	IE151013710605		39	7	14-NOV-10	IE151013771385	OTH	VG		1
633	IE151013750633		48	5	01-OCT-10	IE151013741366	BYJ	G		

Dairy Efficiency Programme

REQUIRED INFORMATION		HEALTH EVENTS		Dairy Efficiency Programme Rules and Forms Frequently Asked Questions
	% Complete		No. of Events Recorded	
Sire	100%	Record Sire	Mastitis 29 events Record Event	
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605	IE151013710605		39	7	14-NOV-10	IE151013771385	OTH	VG		1
633	IE151013750633		48	5	01-OCT-10	IE151013741366	BYJ	G		

Dairy Efficiency Programme



RECORD COW MASTITIS EVENT

Listed below are cows currently in your herd or cows which calved since 01-Jan-11. For the relevant animal(s), select the number of mastitis events that have occurred, then press the save icon (💾) when it appears to save your changes.

Records marked with * have been received from another source apart from the DEP application e.g. farm software package, so therefore cannot be edited here.

Print Download Help

Total: 139 animals

Click Column Heading to sort by that attribute. Number of Animals Displayed : 139 [Reset](#)

FB	Cow Tag	Death Date	EBI €	Lact.	Last Calving Date	No. Of Mastitis Events
467	IE151013740467		104	8	10-FEB-11	No Mastitis
504	IE151013780504		79	9	02-MAR-11	No Mastitis 1 case 2+ cases
550	IE151604920550		126	4	22-MAR-11	No Mastitis
566	IE151013740566		96	6	05-OCT-10	1 case
568	IE151013760568		77	7	08-MAR-11	No Mastitis
569	IE151013770569		55	7	03-MAR-11	1 case *
590	IE151013740590		77	7	28-FEB-11	1 case *
605	IE151013710605		39	7	14-NOV-10	No Mastitis
633	IE151013750633		48	5	01-OCT-10	No Mastitis

HerdPlus® Developments

- HerdPlus Overview
- Security & Data Privacy
- Dairy Efficiency Programme
- Teagasc e-Profit Monitor – Launch Today!
- Weight Recording Service

Teagasc eProfit Monitor

- **Similar layout to current paper version**
 - Printable for ease of completion
- **ICBF Data pre-populated where available**
 - Co-op Milk data, Stock Sales/Purchases, Stock Reconciliation, EBI, Calving Start/End dates, etc.
- **Data exported direct to Teagasc database**
 - Secure data transfer with confirmation
- **Partial Export (ICBF only) or Completed data**

Teagasc eProfit Monitor



ICBF Web Application

KEVIN DOWNIN

Logged in at : 08-Dec-2011 15:1

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HerdPlus BEEF Page >>

HERD INFO

RECORD EVENTS

CALVING

FERTILITY

REPORTS

STOCK REPORTS

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Dairy Farmers have responded well to the over-quota situation as can be seen in the latest CSO stats - Milk deliveries back 12.7% in October.

Milk Statistics - October 2011
www.icbf.com

277 People Reached

30 November at 15:12

CATALOGUE

e-PROFIT MONITOR

DEP

EBI / GENOMICS

DAIRY SIRE ADVICE

INBREEDING

GENE IRELAND

MILK RECORDING

AHI ANIMAL HEALTH



ICBF Bull Search

Search by:

- ☒ Ai Code, Tag, Herd Book No, ITT
- ☐ Name or part of name

[Active Bull Lists](#)

Teagasc eProfit Monitor

Teagasc e-Profit Monitor - Dairy - 2011

livestock

Note: This data is not to be relied upon until all end of year figures are available.

	Opening		Sales		Purchases		Closing		Average
	Number	Value €/hd	Number	Value €/hd	Number	Value €/hd	Number	Value €/hd	
New Born Dairy Calves			50						
Dairy Cows	125		20		0		0		137
Suckler Cows	0		0		0		0		0
Stock Bulls	0		0		0		0		0
Replacement Heifers 0-1 Years	51		1		0		0		51
Replacement Heifers 1-2 Years	34		1		0		0		44
Replacement Heifers 2+ Years	10		4		0		0		3
Cattle 0-1 Years	8		47		0		0		7
Cattle 1-2 Years	47		26		0		0		21
Cattle 2+ Years	2		36		0		0		2

Teagasc eProfit Monitor

Farm Details	Land & Quota Use	Sales & Premia	Livestock Sales & Purchases	Stock Reconciliation	Variable Costs	Fixed Costs	Assets & Liabilities	Dairy Physical
--------------	------------------	----------------	-----------------------------	----------------------	----------------	-------------	----------------------	----------------

Monthly Livestock Table

Note: This data is not to be relied upon until all end of year figures are available.

	Start	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Average
Dairy Cows	125	136	148	141	141	137	135	135	135	135	133	133		1509	137
Suckler Cows	0	0	0	0	0	0	0	0	0	0	0	0		0	0
Stock Bulls	0	0	0	0	0	0	0	0	0	0	0	0		0	0
Repl. Heifers 0-1 Yrs	51	50	59	49	53	53	53	53	53	50	46	44		563	51
Repl. Heifers 1-2 Yrs	34	36	35	47	47	46	46	46	46	45	46	47		487	44
Repl. Heifers 2+ Yrs	10	11	6	0	0	0	0	0	0	4	7	8		36	3
Cattle 0-1 Yrs	8	6	15	13	12	6	5	5	5	5	5	5		82	7
Cattle 1-2 Yrs	47	49	34	25	26	27	20	19	18	3	3	3		227	21
Cattle 2+ Yrs	2	4	14	2	2	2	0	0	0	0	0	0		24	2
Total	277	292	311	277	281	271	259	258	257	242	240	240		2928	266

Teagasc eProfit Monitor

Farm Details	Land & Quota Use	Sales & Premia	Livestock Sales & Purchases	Stock Reconciliation	Variable Costs	Fixed Costs	Assets & Liabilities	Dairy Physical
--------------	------------------	----------------	-----------------------------	----------------------	----------------	-------------	----------------------	----------------

Calving and Herd Information

Calving Start Date

Total Calvings

Calving End Date

Number Calved in 1st 6 weeks

Number Calved in Feb/Mar

Herd EBI

Note: This data is not to be relied upon until all end of year figures are available.

Concentrate and Grazing

	Dairy Cow Conc.	Replacement Conc.	Cattle Concentrate
Average Concentrate Cost (Euro/tonne)	0	0	0
Turnout Day to Grass by Day	30-03-2011	Housing Date (Cows in Fully)	10-10-2011
Turnout Day to Grass Fully	07-04-2011		
Date of end of 1st grazing rotation	05-07-2011		

HerdPlus® Developments

- HerdPlus Overview
- Security & Data Privacy
- Dairy Efficiency Programme
- Teagasc e-Profit Monitor
- Weight Recording Service

Project Objectives

To develop a sustainable National Weight Recording Service

Why?

- Currently no national system in place for collecting large numbers of on-farm weights like we have for milk recording.
- More Accurate Beef & Dairy Genetic Evaluations
- Weight recording is also of benefit to farmer
 - Target heifer bulling weights, cow live-weights, etc.

Tru-Test Upload Facility

- Large majority of farmers have weights already collected using Tru-Test scales
- Lots of weights stored on farmers PC & not in the ICBF database
- ICBF has developed a new web application to upload these weights to the ICBF database

Tru-Test Upload Facility

Online functionality to upload weight data to ICBF

1. Download Tag numbers from ICBF to Scales
2. Download weights from weighing scales to PC
3. Upload to ICBF database

TRUTEST FILE MANAGEMENT [Help](#)

FILE UPLOAD

Use the Browse button below to select the file for uploading from your PC.

the file has to be in csv format.

Once the file is selected use the Upload button to upload the file to ICBF.

Weight Recording Process



Summary

- New weighing scales is currently under test
- New weight report is being developed
- 2012 - On track to commence pilot service
- 2012 - 2013 : National Roll-out of service

HerdPlus® - Social Network



www.facebook.com/HerdPlus



www.twitter.com/HerdPlus

Dairy Discussion Group Projects 2012

**sponsored by ACCBank, Teagasc, ICBF
and Irish Farmers' Journal**



Two sections - €40,000 prize fund

- **Breeding and heifer rearing project**
 - €20,000 prize fund available
 - To be shared amongst participating groups
 - First 100 groups to qualify to share in fund
- **Innovation project**
 - €20,000 prize fund available
 - Max. of four groups to qualify - a max. prize of €5,000 per group



Breeding and heifer rearing project

- Overall objective of this category is to encourage participation in goal setting and performance monitoring
- Template developed – ten criteria
- Individual groups to complete
 - establish 2011 performance
 - set goals for 2012 performance
 - 2012 actual performance data provided by ICBF later in 2012



Innovation project

- Separate application form
- Groups submit an innovative project to the competition
- Guidelines re. suitable/ unsuitable projects
- Competition based
- Up to ten projects short listed
- A maximum of four projects will win a prize at the end of 2012



How to take part ...

- Initiative launched today
- Application forms available from 9th Dec. on partner websites and from Teagasc Dairy Advisers
- Both sections open to **all** discussion groups
- Closing date for return of completed application forms

– **Breeding and heifer rearing project** **Friday 17th Feb**

– **Innovation project** **Friday 27th Jan**



Top Daughter Proven Bulls & Breeders

AI CODE	BULL NAME	BREEDER	ADDRESS	EBI	REL	DTRS	SIRE	PROOF
NFT	COOLNASOON FAIRGALT 2	MICHAEL MURPHY	COOLNASOON KILLINARDRISH CARRIGADROHID MACROOM CO CORK	213	70	17	GMI	DP
PKK	PARKDUV MARK	MICHAEL DOWNING	FARRANASTIG WHITECHURCH CO CORK	203	75	89	RUU	DP
EDV	EEDY DIVA OMAN	R&S HELEN	LISROE LYRE CLONAKILTY CO CORK	202	77	86	OJI	DP
RVJ	RAHEENARRAN BCG SOCHAR	BRYAN DANIELS	RAHEENARRAN KILMOGANNY KILKENNY CO KILKENNY	195	67	64	BCG	DP

Top Genomically Selected Bulls & Breeders

AI CODE	ANIMAL NAME	BREEDER NAME	BREEDER ADDRESS	EBI	REL	DTRS	SIRE	PROOF
KXV	KEVINSFORT RXO VER	MICHAEL KINANE	KEVINSFORT LITTLETON THURLES CO TIPPERARY	265	54	0	RXO	GS
SOK	SUNNYBANK OMAN	KEVIN MCSWEENEY	SUNNYBANK KILLARD BLARNEY CO CORK	254	64	0	OJI	GS
LLK	LAURAGH LANCE	PAULINE RYAN	LAURAGH CAPPAGH CO WATERFORD	244	64	0	BWH	GS

Top Data Recording Herds

NAME	ADDRESS	CATEGORY	SCORE
BERNARD FRAWLEY	ROCKWELL FARM, CASHEL, CO TIPPERARY	150+ COWS	797
JOHN HANLY	HEATHVIEW FARM, HORSE & JOCKEY, THURLES, CO TIPPERARY	150+ COWS	408
ROBERT TROY JUNIOR	BALLINAKILL WEST, NEWTOWNSHANDRUM, CHARLEVILLE, CO CORK	150+ COWS	399
DANIEL & DECLAN FLYNN	KNOCKSOUNA, KILMALLOCK, CO LIMERICK	80-150 COWS	350
CONOR MOLONEY	CLOBANNA, THURLES, CO TIPPERARY	80-150 COWS	324
MATTHEW & JOHN QUINLAN	CAPPAGH HOUSE, CAHIR CO TIPPERARY	80-150 COWS	281
JOHN KIERAN O'BRIEN	GRALLAGH LR, GRANGE, YOUGHAL, CO WATERFORD	<80 COWS	258
MUIRIS O'DONOGHUE	FEIGHMANE, VALENTIA ISLAND, CO KERRY	<80 COWS	253
DANIEL O'KEEFFE	FAIRYHILL, KANTURK, CO CORK	<80 COWS	241



ICBF “Genomics for Females” Service

ICBF have launched a “research project” to encourage genotyping of females (on whole herd basis).

Options:

1. Full cohorts of females (cows, 2010 and/or 2011 heifers)
€30/animal (inc VAT).
 2. Other dairy breed's (cows)=€30/animal (inc Vat)
- Genotyping is the process of determining differences in the genetic make-up of an animal by examining the animals DNA sequence.

Find out the Genetic merit of your animals



Benefits:

- Provides the latest information on how good an animal is going to be.
- Use this highly accurate and cost effective EBI data to breed, sell or cull animals.
- Increase in reliability equivalent to animal having 14 progeny.
- Genomics will help identify extremes.
- The more cows you genotype, the greater the likelihood of finding extremes.
- Genomics will help identify correct parents.
- See the impact of genes on milk production, fertility, health and more.

Rules:

- Service is available now for Holstein Friesian and Pure Friesian females.
- Cows from other dairy breeds can be genotyped now also, results later in 2012.
- Young stock cannot be >6.25% of a third breed (other than Holstein/Friesian)
- Pure FR can only be done on the Low Density chip if sire is done on 54k already.



Cost:Benefit.

- Cost of ~€30 (including VAT).
- Benefit of:
 - €70 from breeding replacements.
 - €15 from culling.
 - €15 from parentage identification.
 - €20 from bull mothers.
- Total of €120 = 4:1 return on investment.
- Other benefits, e.g., long term industry good.
- This offer ends January 22nd 2012.
- Opportunity to genotype 2012 born animals in late Spring.

How it works:

Hair sampling kits will be posted to herd-owners on request:

DNA sampling kits will consist of:

- 1 hair card for each sample labelled with the animal tag number.
- Instructions for hair collection.
- Stamped addressed envelope to return samples to ICBF.
- Samples will be sent to genotyping laboratory for analysis, results will be returned to ICBF.
- Data will be evaluated and a genomic evaluation report will be presented for each animal.
- The turnaround time is approximately 4 weeks.

By helping yourself to breed more profitable animals you are helping ICBF in their dairy research and industry development.

Please contact ICBF on 1850 600 900 for more information or email query@icbf.com



Low Density 7K “Genomics for Females” Sign Up Form & Options.

IE: No

Name:

Mobile No:

Options	Description	Tick Box to select option
OPTION 1	<u>YOUNG STOCK</u> All Dairy Replacements (2010 & 2011 born heifers)	
OPTION 2	<u>All 2010</u> born heifers only	
OPTION 3	<u>All 2011</u> born heifers only	
OPTION 4	<u>Cows & Young Stock</u> All Dairy Females in Herd (Cows & Heifers)	
OPTION 5	2010 and/or 2011 born heifers and selected cows	
Call 1850 600 900 for further inquiries.		
Please return form to HerdPlus/Genomics Service, ICBF, Highfield House, Bandon, Co. Cork		

- Keen to ensure uptake on these initiatives.
- Genomics is revolutionising cattle breeding.
- Very attractive package being offered by ICBF to farmers.
- Strongly encourage you to consider (4:1 return on investment).
- Opportunity to invest positively in your farm business.

