



IRISH CATTLE BREEDING FEDERATION

Using an Integrated Database to increase profitability on Dairy Farms

Kevin Downing

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- Background to Database (2002-2012)
- HerdPlus® Dairy
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2001

AI Companies

Genetic
Evaluations

Milk Recording

Milk Production &
Management Rpts

Herd Books

Ped. Certs & Linears

DAFM - AIM

Calf Reg & Movements

ICBF Database



Animal Events

Dairy & Beef
Farmers

Less Paper – More Profit (2002)

- ICBF 'Animal Events' introduced in 2002
- New system replaced:
 - Birth registration
 - Milk recording registration
 - Calving dates for milk recording
 - Pedigree registration
 - Calving survey data for AI
- 1 line of data – Not 5!
 - Big cost savings to farmers



Less Paper – More Profit (2012)

- Multiple options for data recording
 - ICBF web site – www.icbf.com
 - DAFM web site – www.agfood.ie
 - Paper (Animal Events book) & Farm packages (Agrinet, Kingswood)
 - Handheld devices – AI, Weights, etc.
 - Mobile phones – serves & dry offs
 - 3rd party data – Cattle Marts, Abattoirs, etc.
- From all this integration HerdPlus® was born!

2012

AI Companies

Insems & Genetic
Evaluations

Veterinary
Surgeons

Animal Health Data

Milk Recording

Milk Production &
Management Rpts

Farm Relief
Service

Lameness/Wt. Data

Herd Books

Ped. Certs & Linears

Dairy & Beef
Farmers

HerdPlus
Profit through Science

Animal Events

DAFM - AIM

Calf Reg & Movements

Milk Co-Ops

Bulk Tank Milk Data

Farm Advisors

Discussion Group Rpts

Veterinary
Labs

Health Data

Slaughter
Factories

Grades

Weights/Catalogues

Marts

ICBF Database



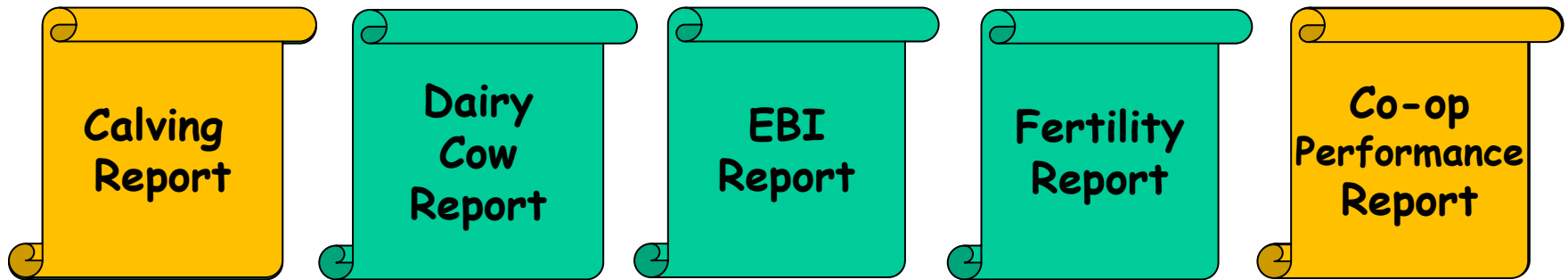
HerdPlus® Dairy

- Suite of management reports & online services
- Developed for ALL dairy farmers
- Launched in Sept, 2006
- Today - 6,050 herds signed up
- 9% increase in the 12 months
- 86% online, 14% postal
- Dedicated online & phone support
- Excellent value - only €60/year!
- Data & Knowledge = Profit



HerdPlus® Dairy Products

- 5 key HerdPlus® reports



- 5 key HerdPlus® online services



1. Dairy Calving Report

- Female fertility key driver of profit on farms
- Ability to benchmark performance
- Management decisions based on factual data
- e.g. Median Calving Date

(a). Summary Data - Report is based on dairy cows that calved between 01/07/2010 and 30/06/2011 . (Embryo births excluded)

Spring Calving Dates

	Start Calving	Median Calving ¹	Last Calving	Calving Period	Avg Age Calving
Cows	30/01/2011	27/02/2011	22/05/2011	16 weeks + 0 days	4y 10m
Heifers	06/02/2011	13/02/2011	10/03/2011	4 weeks + 4 days	1y 11m

All

	Total	Male	Female
Total Calves born	115	54	61
Calves Live at Birth	111	51	60
Calves Dead at Birth	4	3	1

Heifers

	Total	Male	Female
Total Calves born	28	14	14
Calves Live at Birth	28	14	14
Calves Dead at Birth	0	0	0

Eligible Cows² 109
Total Dairy Calvings 112

1. Dairy Calving Report

(b). Top 5 Key Performance Indicators (KPI's)			Btm. 5%	Top 5%
	Your Herd	Nat Avg		
1. Calving Interval (days) Average number of days between successive calvings for cows calved during the period. (84)	377 days	403 days	464 days	364 days
2. Spring 6 Week Calving Rate Number of cows calved within the first 6 weeks (88) as a proportion of all cows calved during the Spring. (112)	79%	52%	19%	81%
3. Calves per cow per year ³ Number of live calves at 28 days (109) that were born to eligible cows. (109)	1	0.85	0.63	1 calves per cow
4. Females not calved in Period Number of cows in the herd on 30/06/2011 that did not have a calving in the period, (0) as a proportion of eligible cows. (109)	0%	11%	28%	0%
5. Current Replacements rate Number of 1st calving cows on 30/06/2011 (28) as a proportion of eligible cows. (109)	26%	25%	Not Applicable	Target 18-22%

2. Co-op Performance Report

- 14 Milk Co-ops currently participating
- 4 Reports/year sent to all suppliers
- Year on Year comparisons of deliveries
- Herd Scorecard & Co-op benchmarking
- Milk Solids/cow/day
- Comparison within production type
i.e. Creamery, Liquid, Winter
- Ideal entry level report
- Key to identifying profitability



2. Co-op Performance Report

- Milk Co-op data e.g. Litres + ICBF data e.g. Cow no.

	Litres			Fat %			Protein %			SCC ('000)			Total Cows	
Month	2011	2010	Diff '10-'11	2011	2010	Diff '10-'11	2011	2010	Diff '10-'11	2011	2010	Diff '10-'11	2011	2010
Jan	38,930	45,632	-14.7%	4.64	4.71	-0.07	3.5	3.6	-0.1	143	191	-48	134	127
Feb	50,336	54,297	-7.3%	4.51	4.58	-0.07	3.42	3.44	-0.02	129	194	-65	146	134
Mar	91,659	79,396	15.4%	4.61	4.37	0.24	3.55	3.31	0.24	126	149	-23	139	133
Apr	111,292	85,960	29.5%	4.18	4.06	0.12	3.44	3.49	-0.05	149	149	0	139	129
May	105,535	88,170	19.7%	4.1	3.91	0.19	3.44	3.49	-0.05	149	149	0	133	129
Jun	101,468	84,749	19.7%	4.1	3.91	0.19	3.44	3.49	-0.05	149	149	0	131	126
Jul	96,676	78,649	23.0%	4.28	4.22	0.06	3.58	3.61	-0.03	116	177	-61	131	124
Aug	80,218	68,144	17.9%	4.28	4.22	0.06	3.66	3.72	-0.06	157	177	-20	131	124
Sep	68,607	59,068	16.1%	4.57	4.43	0.14	3.9	3.87	0.03	152	167	-15	131	124
Oct	51,618	60,439	-14.6%	4.85	4.66	0.19	4.01	3.96	0.05	168	173	-5	128	126
Nov	26,909	53,352	-49.6%	4.76	4.88	-0.12	3.79	3.84	-0.05	171	153	18	119	124
Dec	1,189	48,894	-97.6%	6	4.81	1.19	4.08	3.68	0.4	343	152	191	114	124
Total	824,437	806,750	2.2%	4.34	4.33	0.01	3.57	3.62	-0.05	131	168	-37	131	127

Powerful integrated report

2. Co-op Performance Report

Month	Total Milk Solids			Milk Output - Total Cows					
	Fat + Protein (Kg)			Litres / Cow / Day			Fat + Prot Kg / Cow / Day		
	2011	2010	Diff '10-'11	2011	2010	Diff '10-'11	2011	2010	
Jan	3,263	3,905	-16.4%	9.37	11.59	-19.2%	0.79	0.99	-20.2%
Feb	4,111	4,484	-8.3%	12.31	14.47	-14.9%	1.01	1.2	-15.8%
Mar	7,702	6,279	22.7%	21.27	19.26	10.4%	1.79	1.52	17.8%
Apr	8,732	6,683	30.7%	26.69	22.21	20.2%	2.09	1.73	20.8%
May	8,085	6,791	19.1%	25.6	22.05	16.1%	1.96	1.7	15.3%
Jun	7,816	6,597	18.5%	25.82	22.42	15.2%	1.99	1.75	13.7%
Jul	7,655	6,293	21.6%	23.81	20.46	16.4%	1.89	1.64	15.2%
Aug	6,558	5,571	17.7%	19.75	17.73	11.4%	1.61	1.45	11%
Sep	5,983	5,048	18.5%	17.46	15.88	9.9%	1.52	1.36	11.8%
Oct	4,709	5,364	-12.2%	13.01	15.47	-15.9%	1.19	1.37	-13.1%
Nov	2,369	4,791	-50.6%	7.54	14.34	-47.4%	0.66	1.29	-48.8%
Dec	123	4,275	-97.1%	0.34	12.72	-97.3%	0.03	1.11	-97.3%
Total	67,106	66,081	1.6%	17.24	17.4	-0.9%	1.4	1.43	-2.1%

Useful Management Tips

- Use the following grass management targets this Spring:

- 1/3 grazed at the end of February;
- 1/3 grazed...



- ...to these target rates on wet/heavy farms

- Use teams of AI Sires averaging € 220 + EBI.
- Feed 13kg grass DM + 4kg meals per cow in March:
 - Increase meals by 2kg per cow plus silage if short on grass;
 - Reduce meals to 2 kg per cow if quota is an issue this Spring

2. Co-op Performance Report

	Your Herd	Co-op Average	Co-op Top 10%	Your Rank out of 100	Your Star Rating ¹
Milk performance for 2011 (Jan - Dec) based on Co-op data					
Fat + Protein (Kg/cow) Average Fat and Protein yield per cow for your herd	512	448	527	81%	* * * * *
Litres per Cow per Day Avg litres of Milk per cow from Jan - Dec 2011	17.24	16.02	19	62%	* * * *
Fat % to end December 2011 Weighted average Fat % from Jan - Dec 2011	4.34	3.99	4.19	100%	* * * * *
Protein % to end December 2011 Weighted average Protein % from Jan - Dec 2011	3.57	3.46	3.57	95%	* * * * *
Average Milk Price (cpl) Incl. VAT Average milk price received from Jan - Dec 2011, (Includes Bonuses/Penalties, Excludes Levies)	38.6	37.3	39.1	81%	* * * * *
SCC (,000 cells/ml) The weighted average Somatic Cell Count for Jan - Dec 2011	131	247	128	90%	* * * * *

2. Co-op Performance Report

Fertility & Calving data based on HerdPlus 2011 Calving Report

Calving Interval (days)

Average number of days between successive calvings for cows calved during the period

434

427

400

43%

* * *

Days to calve 50% of cows

Start 21/01/2011 - Median 28/02/2011

39

48

28

81%

* * * * *

Total Dairy Replacements

Dairy Females born in the period (53)
as a proportion of eligible cows (131)

40%

39%

52%

52%

* * *

%AI bred replacements

%female calves born in the period from dairy AI (53)
as a proportion of eligible cows (131)

40%

28%

40%

90%

* * * * *

EBI Statistics based on the latest HerdPlus EBI report 2012

Herd EBI (2012)

Average EBI for Cows (112)
with EBI data

€121

€71

€100

95%

* * * * *

Yearly EBI Gain (2012-2013)

Gain in Herd EBI based on; 0-1yr old, 1-2yr old & 22%
replacement rate

€6

€4.5

€9

75%

* * * *

EBI of 2011 Inseminations

Weighted Average EBI of dairy AI bulls
recorded in Spring 2011

€201

€166

€207

87%

* * * * *

3. Dairy Sire Advice

- Dairy Sire Advice is a tool to assist farmers in their breeding decisions

- Launched in the Spring of 2007

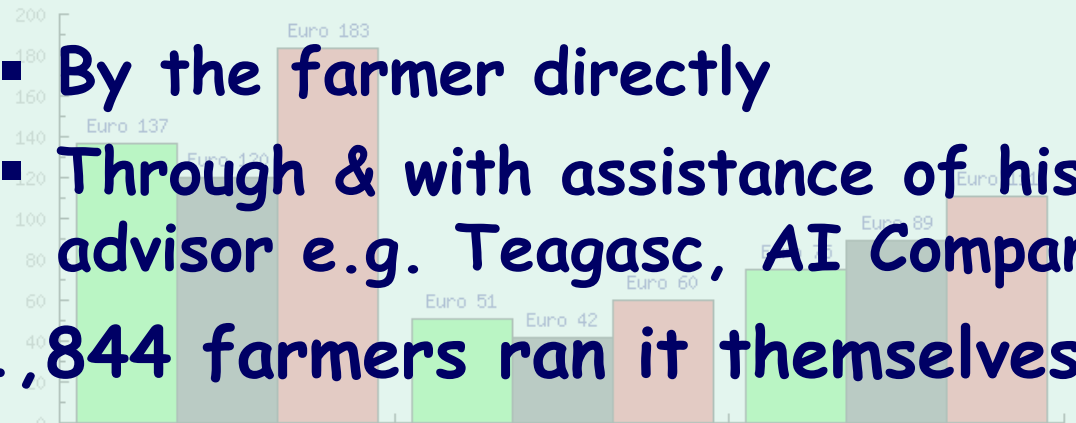
- Sire Advice can be run

- By the farmer directly

- Through & with assistance of his/her breeding advisor e.g. Teagasc, AI Company, etc.

- 1,844 farmers ran it themselves in 2012

- 4,244 total sire advice runs in 2012



Criteria Used to Choose "Suggested Bulls"

Top 30 Bulls from Active Bull List

Select Program

- Suggested Bulls
- Select Bulls using Traits
- Manually Enter Bulls

Select Help Video For Program

- Select Bulls using Traits
- Manually Enter Bulls

Click [here](#) for help.

[Hide Trait Breakdown](#)

[Last Sire Advice PDF Here](#)

The bulls you previously saved are

COWS:	ABO BQB BYH FLT HRJ
	IRP JKF LHZ LLK MHD NFT
	OPH PPM PPK ZPB
HEIFERS:	CGH LHZ PPK SJ

3. Why use Sire Advice?

- To select bulls to suit breeding goals
- Avoid inbreeding (6.25% cut off)
- Avoid lethal gene combination e.g. CVM
- Min. variation between Milk & Fert. Sub-index
- Min. variation in Milk kgs



3. Sire Advice Report

ICBF Sire Advice

KEVIN DOWNING

IE1510137

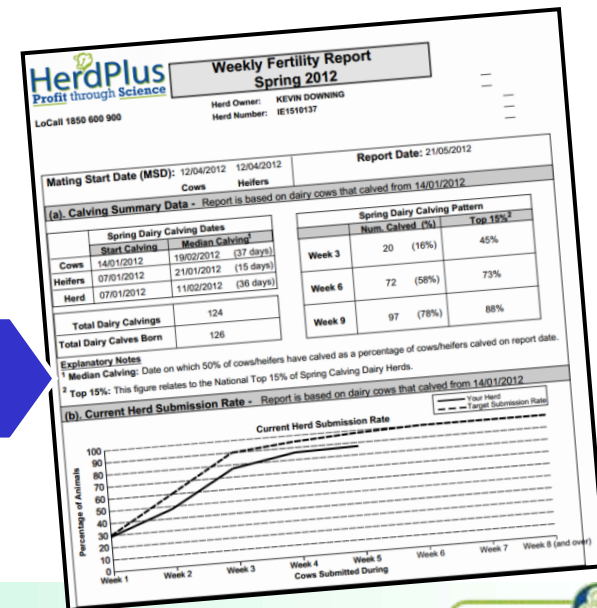
12-APR-2012

3 bull options / cow

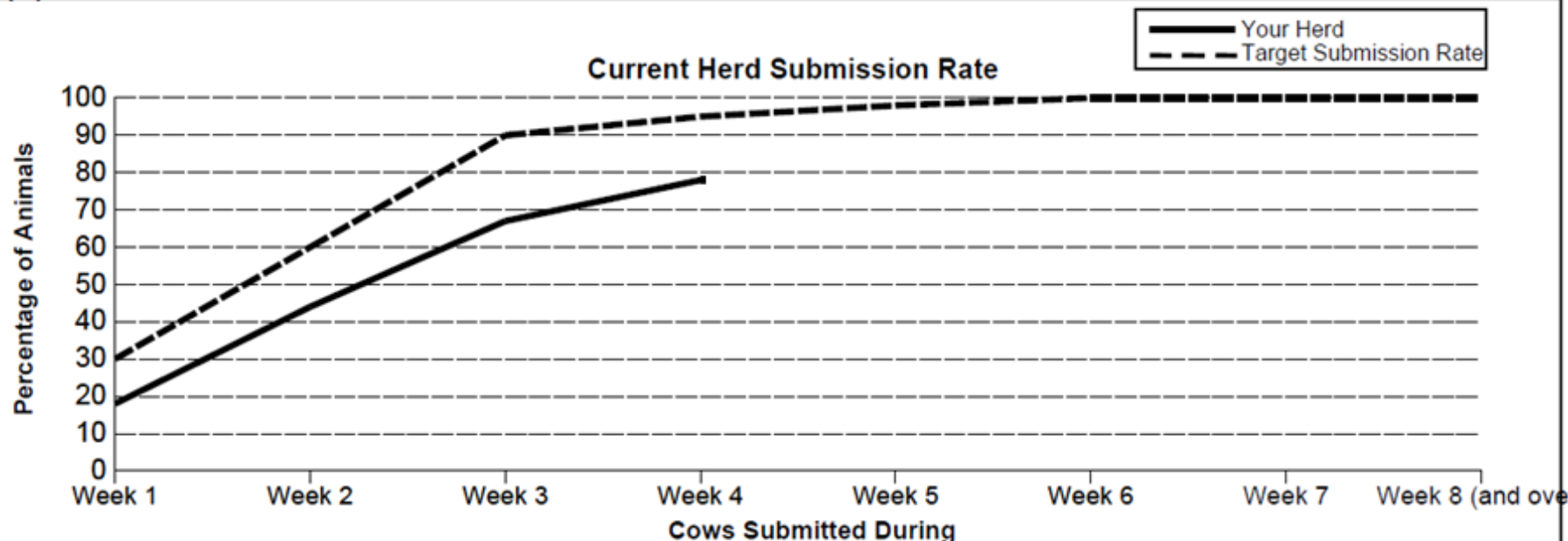
Fb	Tag	Lact	Cow EBI	Bull 1	Bull 2	Bull 3
550	IE151604920550	4	€ 140	PBM	BQB	NFT
566	IE151013740566	7	€ 123	HRJ	BQB	OPH
651	IE151013770651	7	€ 75	IRP	OPH	JKF
673	IE151013740673	6	€ 105	ABO	PKK	BQB
699	IE341460380699	5	€ 150	BQB	PBM	NFT
721	IE151013720721	7	€ 83	PKK	FLT	BQB
764	IE151013740764	6	€ 86	OPH	IRP	BQB
769	IE151013790769	7	€ 122	HRJ	OPH	BQB
772	IE151013740772	6	€ 83	ZPB	MHO	LLK
784	IE151013780784	6	€ 87	LLK	IRP	LHZ
804	IE151013720804	6	€ 72	FLT	PKK	BQB
809	IE151013770809	6	€ 126	IRP	MHO	LHZ

3. Sire Advice at Work

- Linked to AI technician handheld device & HerdPlus® breeding wall charts
- AI Serves sent direct to ICBF database
- Fertility Reports Generated Automatically



(b). Current Herd Submission Rate - Report is based on dairy cows that calved from 19/01/2010



(c). Key Performance Indicators (KPI's)

			Cows		Maiden Heifers	
Days since Mating Start Date:	44	51	Your Herd	Top 15%	Your Herd	Top 15%
	Cows Heifers					
1. 21-day Submission rate Cows/heifers submitted for mating within 21 days of MSD (49 cows/ 29 heifers) as a percentage calved up to 21 days after MSD (73) /dairy heifers > 11mths (50)			67%	69%	58%	90%
2. 42-day Submission rate Cows/heifers submitted for mating within 42 days of MSD (57 cows/ 39 heifers) as a percentage calved up to 42 days after MSD (73) /dairy heifers > 11mths (50)			78%	85%	78%	95%
3. Cows calved >30 days and not bred % of cows calved greater than 30 days at MSD (65) and not yet submitted within 21 days of MSD (17)			26%	21%		
4. 6 Week Repeat rate Cows/heifers with more than one serve (0 cows/ 4 heifers) as a percentage of cows/heifers served in the 1st 6 weeks (57 cows/ 39 heifers)			0%	40% *	10%	30% *

4. Discussion Group Reports

- One third of dairy farmers in discussion groups
- Farmers data made available to farm advisors
- No posting/emailing info prior to meeting
- More accurate & allows for group comparison
- Consistent message from ICBF & Teagasc
 - 'High EBI Cows are more Profitable'
- Group activity - key reason for EBI adoption which is a proven driver of profitability

4. Discussion Group Reports

- Range of reports available e.g. Calving, Fertility
- Example of Group EBI Report

[illegible]

Summary

- ICBF Database - Well Connected
- HerdPlus® saving farmers time and money
- Increased interaction with industry partners
- Continued growth in HerdPlus®
- Discussion groups - key to HerdPlus® adoption
- Continued development of reports & services
- HerdPlus® part of young farmer training

Data & Knowledge = Profit!

ICBF HerdPlus® - Social Network



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twitter.com/HerdPlus

[#ICAR2012](https://twitter.com/HerdPlus)

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Thank You