



Future Direction of Dairy Cattle Breeding in Ireland

Tara Suite, Conference Centre, SilverSprings Moran Hotel, Tivoli, Cork.

Wednesday 4th February 10:00 AM – 4.15 PM

1. Purpose

To provide a forum for Irish cattle breeding industry leaders to share ideas on future directions, especially in relation to:

- ***Breeding Objective***
- ***Progeny Testing***
- ***Milk Recording***

2. Participants

- Board, Directors and Council Members of ICBF member organisations.
- Senior Managerial Staff within ICBF's member organizations.
- Industry partners; TEAGASC, DAF, ICOS, Milk Processors, Agricultural Trust and invited guests.

3. Conference Program

- 10.00 AM **Registration, Tea & Coffee.**

Session 1. Breeding Objectives. Brian Wickham (Chief Executive - ICBF).

- 10.15 AM Opening Remarks – John O'Sullivan (ICBF – Vice-Chairman)
- 10.30 AM Research Trials - Moorepark and DEXCEL - implications for breeding
Pat Dillon (Teagasc).
- 11.00 AM Genetic Evaluations - Enhancements to EBI.
Donagh Berry (Teagasc).
- 11.30 AM Discussion Opener – Breeding Objectives on Irish Dairy Farms
 - Kevin Flynn, Rosenallis, Co Laios – Winter AI.
 - Kevin Twomey, Ballyhooly, Co. Cork – Spring AI.
 - Sean Leonard, Kilbarry, Macroom – Spring AI.
- 11.45 AM Discussion.
- 12.45 PM Lunch.

Session 2. Increasing the Use of Cattle Breeding Services by Farmers. Mike Magan (Chairman IHFA and member of ICBF Board).

- 2.00 PM National Program - sire selection, progeny testing and international partners.
Andrew Cromie (ICBF).
- 2.30 PM Milk Recording - higher benefit/lower cost options.
Martin Burke (ICBF).
- 3.00 PM Discussion Opener – Increasing Use of Cattle Breeding Services.
 - Teddy Cashman, Whitescross, Cork.
 - David Lonergan, Ballyduff, Co. Waterford.
 - Peter Baker, Cloughjordan, Co. Tipperary.
- 3.15 PM Discussion.
- 4.15 PM Conference ends.



IRISH CATTLE BREEDING FEDERATION

Dairy Breeding Conference

Establishing a Shared Vision
for the Future

Brian Wickham

Chief Executive, ICBF

Background

ICBF's Mission is ensure that Irish Farmers have the **Best (€) Cattle in the World** for dairy and beef production.

Good progress has been made with the first two of the three elements required to achieve this for dairy production.

That is:

- Ancestry and performance (€) **data** on most of the cattle in Ireland – the system works but we now need more animals recorded.
- **Genetic Evaluation** to identify the best animals where-ever they are in the world – the EBI is established but is not yet universally accepted.

Purpose of Today's Conference

The purpose of today's meeting is primarily to consider the third element:

- An Optimal **Breeding Structure** in Ireland.

Optimal Breeding Structure

Artificial insemination requires an ongoing supply of high merit bulls. These can only be produced by an efficient progeny test program.

1. Selection of bulls for progeny testing – review where we are with EBI. **Are we on the right track? AM Session.**
2. How to find and how to progeny test bulls for use in AI. A major change in approach is being proposed. **Do we have your support for this? First part of PM Session.**

Optimal Breeding Structure

Rapid genetic gain depends on widespread usage of high merit bulls and the milk recording of most cows.

3. Increase level of milk recording. Our strategy is focused on cost reduction and benefit increases. **Is this right? Second part of PM session.**

Sharing Views & Establishing a Consensus

- Farmer speakers – 3 am and 3 pm. They have been asked to give their views and to stimulate discussion.
- There is plenty of time for discussion. We want you to share your opinions.
- Keep focused on establishing a better future.
- Agree on direction and strategy.



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1. Purpose

To provide a forum for Irish cattle breeding industry leaders to share ideas on future directions, especially in relation to:

- *Breeding Objective*
- *Progeny Testing*
- *Milk Recording*

2. Attending – 115 people

- Staff and directors of ICBF's shareholder members - milk recording, herd book, AI and farm organizations.
- Invited guests – farmers, TEAGASC, DAF, ICOS, Milk Processors and Agricultural Trust.

3. Summary Outcome

- **Breeding Objective** – Irish dairy farmers share the breeding goal of maximizing future profits.
- **Selection Criteria** – The EBI (economic breeding index) is the best available criteria for selecting cattle to achieve the common breeding goal. Ongoing efforts are required to ensure the EBI is continually improved in the light of new knowledge and information.
- **EBI** – The results of the recent review of economic weights point to an increase for fat (kg) and a substantial increase for calving interval (days) relative to the other (milk volume, protein kg and survival) traits. Further research should be undertaken to incorporate calving, udder health and beef traits in the EBI.
- **Active Bull List** – There should be only one list of active bulls provided by ICBF and endorsed by TEAGASC.
- **National Stud** – Highest possible priority should be given to the establishment of a national progeny test program for Irish black and white cattle. This program should make full use of Irish bred cattle and selective imports.
- **Progeny Testing** – Highest possible priority should be given to the establishment of a targeted herd progeny test scheme, along the lines outlined by ICBF at the meeting.
- **Milk Recording** – ICBF's strategy of reducing milk recording costs and increasing the benefits of milk recording were strongly endorsed.

B W Wickham

Chief Executive, Irish Cattle Breeding Federation
5th February 2004.



IRISH CATTLE BREEDING FEDERATION

Status of across-breed evaluations for dairy traits

- Single run, same base
- Compares across breeds
- Uses data from purebred and cross bred animals
- Accounts for hybrid vigor

Across-breed evaluation

- Requirements
 - Suitable evaluation software and model (OK)
 - Sufficient records (refer to next slide)
 - Performance records on 500 of each purebreed, 500+ crosses for milk recording, calving interval, survival, **linears**, calving ease, slaughter data.
 - Pedigree information for all animals.
 - Good mix of breeds within herds
 - Estimation of genetic parameters (required)

Status of Breeds

Breed	Status
HF	Base population for all comparisons
Ayrshire	700 pure breed cows and not good links with others
Jersey	Sufficient links with HF breed and sufficient purebreds
Montbeliardes	Sufficient links with HF and sufficient purebreds
MRY	Sufficient links with HF but not enough purebreds
Norwegian Red	Sufficient pure and crosses with HF will be available from Moorepark study in 2006
Rotbunt	Not sufficient numbers but Red Holstein link may suffice
Shorthorn	Doubtful number in milk recording otherwise sufficient link with HF and sufficient purebreds

Across-breed evaluation – numbers in database

	AY	FR	HO	JE	KE	MO	MY	NR	RB	SH	SI	
Ayrshire	597	108	184	5	1	3	2	0	1	6	5	687
Friesian	108	82298	793324	136	13	649	323	16	74	146	756	187098
Holstein	184	793324	64223	699	87	4438	4225	21	444	1062	7138	639361
Jersey	5	136	699	1117	0	8	2	0	2	8	6	1088
Kerry	1	13	87	0	137	0	0	9	0	2	1	103
Montbeliardes	3	649	4438	8	0	1450	24	0	0	9	107	2230
MRY	2	323	4225	2	0	24	0	0	11	3	18	1336
Norwegian Red	0	16	21	0	9	0	0	0	0	0	0	1
Rotbunt	1	74	444	2	0	2	2	0	0	1	3	28
Shorthorns	6	146	1062	8	2	9	3	0	1	602	332	5498
Simmental	5	756	7138	6	1	107	18	0	3	332	11972	20631
Unknown	687	187098	639361	1088	103	2230	1336	1	28	5498	20631	353568