Beef Data Recording In Ireland
Current Experience & Future Potential of an Industry Integrated National Database

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ICBF
Most Significant Data Flow

- Births & Deaths
- Animal Movements
- Animal Events
Irish Beef Cow Herd

The Numbers

• Approx. 1 million beef cows in 60,000 herds (17 cows/herd)

• Ranging in herd size from 1 – 250.
## What’s Recorded at Birth

### Calf Tag No.
- **Tag Number:** IE1414610 \( \Downarrow \) 60249 (herd designator & animal number)
- **Date of Birth of Animal:** 02/06/15
- **Still Born:**
- **Parental Details**
  - **Dam Tag Number:** IE141461080124
  - **Genetic Dam Indicator:**
  - **Sire Breed:** CH

### DOB & Sex
- **Gender:** FEMALE

### Dam Tag No.
- **Dam Breed:** LMX

### Sire Breed

### All Compulsory Data

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[ICBF.com]
## What's Recorded at Birth

### Additional Data

<table>
<thead>
<tr>
<th>Details</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sire Tag Number</td>
<td></td>
</tr>
<tr>
<td>AI Code</td>
<td>LGL</td>
</tr>
<tr>
<td>Pedigree Name of Calf</td>
<td>IRISH ROVER</td>
</tr>
<tr>
<td>Calving Survey</td>
<td>SOME ASSISTANCE</td>
</tr>
<tr>
<td>Retain Sire Details</td>
<td></td>
</tr>
</tbody>
</table>

### Name

Pedigree Calves Only

### All Optional Data!!

[ICBF.com](https://icbf.com)
Beef Sire Recording in Ireland

All beef calves born 2005-2014

- Pre 2008 less than 20% calves.
- 2008 increased to 80% calves.
- What caused sudden increase?!!
Suckler Cow Welfare Scheme

2008-2012

- Cow & calf welfare and data recording - €80 per cow.
- Sire recording key component.

- Effect of reduction of payment to €40 mid scheme.
Data Availability

Primary Traits

Slaughter Factories

Carcass Data

- Weight
- Conformation
- Fat
- Health

Dept. of Ag AIM System

- Birth Dates
- Dam Tag
- Death Dates
- Sires
- Calving Surveys
- Other Surveys
- Age 1st Calving
- Calving Int.
- Survival
- Link Ancestry
- Calving Difficulty
- Direct & Maternal
- Docility, Quality & Health Data

What about Milk?!?
## Irish Beef Index

**Euro-Stars**

### Calving & Carcass Traits
- Good data submission.
- Reliabilities increase quickly.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Euro value per progeny</th>
<th>Index reliability</th>
<th>Star Rating (across all beef breeds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calving difficulty (% 3 &amp; 4)</td>
<td>5.80%</td>
<td>98% (V High)</td>
<td></td>
</tr>
<tr>
<td>Docility (1-5 scale)</td>
<td>0.02 scale</td>
<td>79% (High)</td>
<td></td>
</tr>
<tr>
<td>Carcass weight (kg)</td>
<td>32kg</td>
<td>82% (V High)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.24 scale</td>
<td>77% (High)</td>
<td></td>
</tr>
</tbody>
</table>

### Maternal Traits
- Less data (particularly milk).
- Slower increase in reliability.

<table>
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<tr>
<th>Trait</th>
<th>Euro value per progeny</th>
<th>Index reliability</th>
<th>Star Rating (across all beef breeds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daughter calving difficulty (% 3 &amp; 4)</td>
<td>6.7%</td>
<td>31% (Low)</td>
<td></td>
</tr>
<tr>
<td>Daughter milk (kg)</td>
<td>2.77kg</td>
<td>34% (Low)</td>
<td></td>
</tr>
<tr>
<td>Daughter calving interval (days)</td>
<td>1.93 days</td>
<td>53% (Average)</td>
<td></td>
</tr>
</tbody>
</table>
Challenge

Milk: The Problem Trait

- Low levels of weighing of suckler beef calves (<20% in 2014).
- Weighing equipment expensive.
- Laborious. Poor facilities & land fragmentation.
Solution

Milk

- No major increase in on-farm weighing likely.
- Free weight recording not sustainable.
- Farmer cow milk scores (1-5) now being submitted.

Initial investigation is positive

• High correlation between scores and weaning weights ~0.9
Solution

*Milk: Profile of an Irish AI Bull*

- Limousin bull – Ardlea Dan.
- Born 2008.
- Entered stud 2010.
- 20,958 progeny.

- 734 daughters calved.
- Only 30 maternal weaning weights.
- 117 daughter milk scores!!
- Much faster increase in trait reliability.
• Still ¼ of calves born in 2014 with no sire.
• What will happen in the absence of financial incentives?!?
• Education & awareness.
Genotyping
Solution to a Problem

• Potential to identify all calves by DNA.
• Will only require date of birth at registration.
Future

Beef Data & Genomics Program (BDGP) 2015-2020

• Most comprehensive yet.
• Payment per hectare (~€80-€90 per cow).
• Requirements
  - Record Data e.g. sires, calving surveys etc.
  - Genotype 60% of herd each year.
  - Introduce high index breeding stock into herd.
• Has secured vital data flows.
Summary

- Huge benefits to ICBF database from industry integration.
- Education – Increase awareness & engagement with farmers.
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Thank You