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

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ICBF

National Development Plan
Transforming Ireland
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.
- DOB & Sex
- Dam Tag No.
- Sire Breed

All Compulsory Data
What’s Recorded at Birth

Additional Data

Sire Tag or AI Code

Name
Pedigree Calves Only

Calving Survey

All Optional Data!!
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**

- **Carcass Data**
  - Weight
  - Conformation
  - Fat
  - Health

- **Slaughter Factories**
  - Dept. of Ag
  - AIM System

- **Compulsory**
  - Birth Dates
  - Dam Tag
  - Death Dates

- **Extra Data**
  - 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**

<table>
<thead>
<tr>
<th>Maternal Traits</th>
<th>Less data (particularly milk).</th>
<th>Slower increase in reliability.</th>
</tr>
</thead>
</table>

**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>4 stars</td>
</tr>
<tr>
<td>Docility (1-5 scale)</td>
<td>0.02 scale</td>
<td>79% (High)</td>
<td>3 stars</td>
</tr>
<tr>
<td>Carcass weight (kg)</td>
<td></td>
<td>82% (V High)</td>
<td>4 stars</td>
</tr>
<tr>
<td>Daughter calving difficulty (% 3 &amp; 4)</td>
<td>6.7%</td>
<td>31% (Low)</td>
<td>2 stars</td>
</tr>
<tr>
<td>Daughter milk (kg)</td>
<td>2.77 kg</td>
<td>34% (Low)</td>
<td>2 stars</td>
</tr>
<tr>
<td>Daughter calving interval (days)</td>
<td>1.93 days</td>
<td>53% (Average)</td>
<td>3 stars</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.

- 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.
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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