Why Gene Ireland?

Terminal Traits Increasing

- Huge emphasis on terminal traits
- Breeding heavier cattle with more muscle
- Maternal traits have suffered dramatically

Past

Maternal Traits (milk & fertility) in Rapid Decline

Gene Ireland
Breeding Profitable Suckler Cows

Future
What is the Goal?

Reverse the decline in maternal traits in the national suckler herd

Profitable Suckler Cows

Milk

Fertility

Calving Ability

Docility
How Will this be Achieved?

Identify the best genetics in pedigree herds to breed maternally strong bulls

Disseminate these genetics to commercial herds via AI and stock bulls
1. Pedigree Breeders

- Over 5000 Pedigree Beef Breeders in Ireland (12 breeds)

- Producing over 10,000 pedigree bulls/annum

- Program is open for Pedigree Breeders to join at any time.

- Committee set up for each breed – made up of:
  - Commercial Suckler Farmers
  - Pedigree Breeders
  - Breed Societies
  - Teagasc
1. Pedigree Breeders

- Currently 225 Breeders signed up to the program (Jun’14)

<table>
<thead>
<tr>
<th>Breeders</th>
<th>Breeds</th>
</tr>
</thead>
<tbody>
<tr>
<td>38</td>
<td>Angus</td>
</tr>
<tr>
<td>9</td>
<td>Aubrac</td>
</tr>
<tr>
<td>3</td>
<td>Belgian Blue</td>
</tr>
<tr>
<td>4</td>
<td>Blonde d’Aquitaine</td>
</tr>
<tr>
<td>45</td>
<td>Charolais</td>
</tr>
<tr>
<td>9</td>
<td>Hereford</td>
</tr>
<tr>
<td>60</td>
<td>Limousin</td>
</tr>
<tr>
<td>10</td>
<td>Parthenaise</td>
</tr>
<tr>
<td>5</td>
<td>Saler</td>
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<tr>
<td>6</td>
<td>Shorthorn</td>
</tr>
<tr>
<td>23</td>
<td>Simmental</td>
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</table>
1. Pedigree Breeders

- Pedigree breeders undertake to do two things:
  1. Record high levels of accurate data on their pedigree stock.
  2. Place more emphasis on maternal traits when choosing bulls to mate with their cows.

- Pedigree Breeder’s Data records are checked for their accuracy e.g. insemination records etc.
- The Stamp is awarded when the herd’s data reaches a certain level.
2. Identify Bull Mothers

- All females in participating pedigree herds are Scored & Weighed.

- Extra data collected on them:
  - Udder Suspension
  - Teat Size
  - Teat Placement
  - Width & Length of Pelvis
### 2. Identify Bull Mothers

**Marsha Wanda** – the dam of one of the 2014 Gene Ireland Young Bulls - KDZ
2. Identify Bull Mothers

- Curaheen Dickens (KDZ) — Curaheen Warrior x Marsha Wanda.
- Ploughing Championship 2013 - Norbrook Champion Bull
- Gene Ireland Youngbull Spring 2014
- Milk in the backpedigree – Hillcrest Jerome.
- Bloodline has bred well.
  - Full Brother: Curaheen Buck - €6100 to the pedigree Simmental Jalex herd in Antrim.
  - Full Sister: Auroch Belle - €8000 to the pedigree Simmental ‘Hillcrest herd in Offaly.
- Full Sister: Curaheen Elegance (Born: 2nd Oct 2013).
3. Identify Bull Fathers

- Each Committee selects Maternally strong AI Sires

**Repair**
- Proven Maternal Sire
- French Maternal Index: 111
- Easy Calving
- 4.5 Stars – Replacement Index
- 5 Stars – Daughter Milk

**On-Dit**
- Proven Maternal Sire
- French Maternal Index: 121
- Easy Calving
- 5 Stars – Replacement Index
- 5 Stars – Daughter Milk
3. Identify Bull Fathers

- ICBF has 5 Herd Liaison Officers to assist Breeders:
  - Selecting what bulls to use on their cows.
  - Ensuring that their data is recorded accurately.
  - Liaising with Breeders over all aspects of the program.
4. Select the Young Bull

1. Young Pedigree Bull calves with high Indexes identified

2. Breed Committee decides on the selection criteria:
   – Replacement Index
   – Back Pedigree
   – Physical Appearance

3. Bulls meeting the criteria are inspected.

4. Results of inspections reviewed by each committee.

5. Preferred Bulls purchased for progeny testing.

6. AI Company Bulls that meet the same criteria are also included.
5. Progeny Test

After Bull is purchased by Gene Ireland:

1. Health Tested for entry into AI Station.

2. 1000 doses collected off each bull.

3. 500 straws made available for progeny testing.

4. 500 straws stored away for future pedigree breeding.

5. Following semen collection the bulls are sold.
5. Progeny Test

- Over 20 young beef bulls have been sourced from participant’s herds so far in 2014.
- 500 straws from the best of these – after the progeny test, will only be available to Bull Breeder Herds.
5. Progeny Test

- YCM – Clewbay Highmaster
- Selected by the Charolais Breeding Committee
- Purchased by Gene Ireland
- 1000 straws collected off him
- Why was Gene Ireland interested in him?
5. Progeny Test

- **Dam of YCM – Clewbay Daisy**

<table>
<thead>
<tr>
<th>Animal Details</th>
<th>Ancestry Details</th>
<th>Euro-Star Index</th>
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<tbody>
<tr>
<td>Jumbo: 371</td>
<td>Sire’s Sire: FR5898106514 ORIENTAL</td>
<td>* * * * Maternal</td>
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<tr>
<td>Official Tag: IE272285830371</td>
<td>Sire’s Dam: FR7194109870 JACOBINE</td>
<td>**</td>
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<tr>
<td>Animal Name: CLEWBAY DAISY</td>
<td>Dam: IERLHK0089Q LOUISBURGH ORGAN</td>
<td>**</td>
</tr>
<tr>
<td>Date of Birth: 12/12/2008</td>
<td>Dam’s Sire: KCDEM09 CLONKEEFY MACINERNY</td>
<td>**</td>
</tr>
<tr>
<td>Breed: CH (100%)</td>
<td>Dam’s Dam: LOB004 LOUISBURGH BRONAGH</td>
<td>**</td>
</tr>
</tbody>
</table>

**Expected Progeny Performance**

- Calving Difficulty (%3&4): 7.2% 37%
- Docility (1-5 scale): +0.10 47%
- Carcass Weight (Kg): +26 Kg 32%
- Carc Conf. (1-15 scale): +1.57 30%
- Daught Calv Diff (%3&4): 3.7% 32%
- Daught Milk (Kg): -4.2 Kg 57%
- Daught Calv Int. (Days): -3.73 Days 32%

**Calving & Fertility Performance**

<table>
<thead>
<tr>
<th>Calving Date</th>
<th>Tag Number</th>
<th>Calving Survey</th>
<th>Calving Interval</th>
<th>Sex</th>
<th>Current Status</th>
<th>Sire</th>
<th>Sire Breed</th>
<th>Age days</th>
<th>Weight Kgs</th>
<th>Growth Kg/Day</th>
<th>Price/Kilo</th>
<th>Calf Quality</th>
<th>Docility</th>
<th>Age at Slaughter (months)</th>
<th>Carcass Conf. &amp; Fat</th>
<th>Carcass Weight</th>
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<td>IE272285810411</td>
<td>Normal</td>
<td>M</td>
<td>Exported</td>
<td>PTE</td>
<td>CH</td>
<td>265</td>
<td>408</td>
<td>1.39</td>
<td>Excellent</td>
<td>V. Quiet</td>
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<td>20/09/2012</td>
<td>YCM</td>
<td>Normal</td>
<td>M</td>
<td>Sold</td>
<td>REP</td>
<td>CH</td>
<td>179</td>
<td>264</td>
<td>1.25</td>
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<td>28/08/2013</td>
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<td>196</td>
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</tbody>
</table>
5. Progeny Test

- Sire of YCM – ‘Repair’

‘Maternal’ Bulls can have good beefing ability as well!
5. Progeny Test

What happens the 500 straws of YCM?

1. Herds are signed up to take the Testbull semen.
2. Semen orders are dispatched.
3. Inseminations take place & calves are born.
4. Calves are followed up on
   1. Calving Survey
   2. Weight Gain – % of his weanlings are weight recorded.
   3. Feed Efficiency - % of his weanlings are purchased for finishing here in Tully.
   4. Carcass Merit – The cattle killed through Tully have their carcasses assessed.
   5. Daughter Performance – Daughters are monitored in progeny test herds for:
      1. Growth – weight gain & conformation of their progeny.
      2. Milk & Fertility of his daughters.
5. Progeny Test - Beef

- Weight Gain
- Feed Intake
- Carcass Conformation
4. Progeny Test – Milk

2 Commercial Bulls born in the same herd on the same day & sired by the same Sire

- **651** (85% LM/ 15% BB)
  - Dam: 471
  - 317Kgs
  - 50Kgs Difference - a portion of this is the milk of their dam’s

- **652** (85% LM/ 15% CH)
  - Dam: 471
  - 367Kgs
5. After the Progeny Test

Proven Bulls

• Bulls that return to the programme as elite bulls after the progeny test will be used as future bull fathers.

• Semen from these bulls will be used by bull breeder herds to breed the next generation of elite young bulls for testing.

• By repeating the process again and again and again and again the result is:

Genetic Gain

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