Challenges facing the viability Sheep Irelands sheep genetic improvement program in the Irish sheep Industry
Sheep Ireland - Background

• Began in 2009 after industry consultation.

• Followed on from Pedigree Sheep Breed Improvement Program (PSBIP), which only concerned with growth rates.

• Very little industry progress made in past thirty years.

• EBI & Beef €uro-Star delivering huge results.

• Potential of recording in Sheep Industries elsewhere has shown major gains can be made.
Sheep Ireland - Structure

- MALP (Maternal Lamb Producers Group)
- CPT (Central Progeny Test)
- LambPlus (Pedigree recording service)
Data Recorded

• Lamb parentage.
• Lambing Difficulty Survey (Scored 1 – 4)
• Weights at Lambing, 40 day & Weaning. Other weights can be recorded.
• Lamb Survival Data
• Ultrasound Scanning
• Dag scores (MALP & CPT only)
• Lameness (MALP & CPT only)
• Faecal Egg Counts (CPT only – so far)
• Mature ewe weights (MALP & CPT)
How to use the €uro-Star’s when purchasing a Ram

1. Identify what aspect of Flock Performance you are trying to improve ie.

2. To Improve quality of Factory Lamb- use a ram with 4* or 5* in Production Index.

3. To Improve Quality of Replacement Females- choose ram with 4* or 5* in Maternal and Lambing Index.

4. Use the €uro-Star Indices as a Tool to help you in your selection process.

| €uro-Star Categories | | |
|----------------------|----------------|
| ★★★★★               | 5 Stars: Top 20% |
| ★★★★                 | 4 Stars: Top 60-80% |
| ★★★                  | 3 Stars: 40-60% |
| ★★                    | 2 Stars: Bottom 20-40% |
| ★                     | 1 Star: Bottom 20% |
**Sheep €uro-Star Catalogue - Example**

<table>
<thead>
<tr>
<th>Animal Details</th>
<th>Ancestry Details</th>
<th>€uro-Star Indexes - 10/10/11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Official Id</td>
<td>Sire's Sire: Teiglum Magnum (CFT06231)</td>
<td>% Rank</td>
</tr>
<tr>
<td>Tattoo</td>
<td>Sire's Dam: Forkins (GAF06097)</td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>Sire: Castlescreen O-J (TXC08029)</td>
<td></td>
</tr>
<tr>
<td>Birth date</td>
<td>Sire: Ballybrooney (EWI08011)</td>
<td></td>
</tr>
<tr>
<td>Breed</td>
<td>Dam: Tullagh Neptune (CJT07023)</td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>Dam: Ballybrooney (EWI05034)</td>
<td></td>
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<tr>
<td>Birth type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dam rec</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Musc &amp; fat scan date</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Other Key Traits**

- **Days to Slaughter**: -0.562 days (48%)
- **Lamb Survival**: 2.572% (31%)

**% Rank**

**Rams rating within Star Value**

**Star Rating**

Help give an instant indication as to where an index for a particular animal places it compared to all others within its breed.

- 5 Stars: Top 20%
- 4 Stars: Top 60-80%
- 3 Stars: 40-60%
- 2 Stars: Bottom 20-40%
- 1 Star: Bottom 20%

**Overall Sheep Value**

Gives the overall €uro Star Rating of the Sheep.
Performance recording – where are we?

• Approximately 1000 pedigree breeders in Ireland (some not very active)
• 250 pedigree ram breeders now recording with ‘LambPlus’ in 2012 season - (150 in 2011)
• 33,766 Commercial sheep farmers (Dept of Agri – census 2011)
• Approximate annual ram demand of 15-16,000 rams, based on a breeding ewe population of 2.36 million.
Performance recording – where are we?

• Huge potential exists to deliver major gains to the industry through annual ram sales
• Sheep Ireland produced 5000 ram evaluations in 2011
  o Of which only 1000 can be 5 Star for any one trait
• 2011 marked the first Sheep Ireland €uro-Star ram sale
  o Resulted in a lot of exposure & publicity
  o Helped educate and promote the €uro-Star message to Ram buyers & Pedigree breeders alike
  o Similar event planned for 2012 season
Challenges to the €uro-Stars

- Adoption of the €uro-Stars by the Industry
- Demonstration of the benefits
- Evaluation Accuracies
- Factory Engagement
- Technology
- Self-recording aspect of the programme
Adoption of the €uro-Stars by the Industry

• Prompt adoption of the €uro-Stars will be essential to realise the full potential of genetic improvement
• Industry wide support will be critical to ensure this happens – Teagasc
• Commercial farmer demand will be the stimulus for greater breeder participation and ultimate progress
• Education & promotion through MALP & CPT delivering results
Demonstration of the €uro-Stars

• Industry stakeholders need constant reassurance that breed improvement programmes are worthwhile
• Sheep Irelands MALP & CPT programmes are critical to fulfilling this role
• 22 Commercial flocks using recorded rams and gather data to both contribute to and validate the €uro-Star Index
• Key message to be demonstrated is that genetic gain is permanent
Evaluation Accuracies

- Urgent need to increase breeder participation in the scheme and expand data set upon which our evaluations are based
- Low accuracies have the potential to dishearten users and damage the potential progress of the €uro-Stars
- Education again key – MALP & CPT
- Flock book participation getting stronger – breed pedigree helping to strengthen accuracies
Factory Engagement

• Most notable ‘missing link’ from the Sheep Ireland evaluation process is a reliable source of carcase information
• Systems currently not in place to deliver this information
• Ultrasound measurements of Muscle & Fat depths are currently our best predictors of carcase quality
• Current regulations insisting on a single identity for each ovine animal in Ireland will facilitate progress in this area
Technology

- Technology presents major opportunities to the Sheep Ireland programme but the adoption of this Technology by Sheep farmers poses a major challenge.
- Electronic Identification of lambs will facilitate easier data collection.
- EID will open up the possibility of incorporating carcase data from slaughter plants.
- Uptake may be slow due to the demographic of Irish Sheep farmers, which is an ageing one.
Self-recording aspect of the programme

- Source of criticisms from pedigree & commercial sector
- Independent Ultrasound Muscle and Fat measuring hugely important
- Promotion of Ultrasonically scanned ram lambs essential
- Commercial ‘unbiased’ data in the Sheep Ireland evaluation is critical to instil a sense of confidence and trust in the end users mind
- Expanding this commercial element will be a challenge but hugely important to the future of the programme

Sheep Ireland
www.sheep.ie
• Thank You