Signet Friday SBRT Session

Samuel Boon – Signet Breeding Services
Overview

• Signet & the Levy Bodies
• Ultrasound scanning
• Breed update
• Service update
• Data transfer update
Governance provided by the Signet Guidance Group made up of EBLEX Board Members
Genetic Evaluations
Collation of data
Provision of EBVs
Reporting
Measurement services
Consultancy

Technology Transfer (England)
Promotion of EBVs to pedigree & commercial produces
## Technology Transfer

<table>
<thead>
<tr>
<th>QMS</th>
<th>HCC</th>
<th>EBLEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kathy Peebles</td>
<td>Sion Aron Jones and team</td>
<td>Chris Lloyd and team</td>
</tr>
<tr>
<td>Scottish Sheep Strategy</td>
<td></td>
<td>Sam Boon and team</td>
</tr>
<tr>
<td>Michael Blanche</td>
<td></td>
<td></td>
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<tr>
<td>Katie Keiley</td>
<td></td>
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</table>
Levy Support

- EGENES Data Analysis
  - £82,000 EBLEX, HCC and QMS
- EGENES Development Work
  - £30,000 EBLEX
- FEC & CT Scanning
  - £23,000 in 2012 EBLEX + QMS + HCC
- U/sound scanning (running costs)
  - £60,000 in 2013 EBLEX
Scanning

- New equipment
- Bridget Gilman has helped out

- Lambs scanned
  - 42,570 2010/11
  - 44,981 2011/12
  - 40,143 2012/13
Correlations 0.96-0.99 across the various tests
Sheepbreeder membership

Hit a 10 year high

Membership has fallen by the end of 2013

• SB virus
• Difficult winter / lack of money
• Lack of optimism about ram trade
• End of successful HCC project
• Lack of levy support in Northern Ireland
<table>
<thead>
<tr>
<th>Breed</th>
<th>No. Lambs</th>
<th>No. Breeders</th>
<th>Lambs with early weight</th>
<th>Lambs scanned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Texel (about 200 Signet client)</td>
<td>59,224</td>
<td>1,311</td>
<td>11,305</td>
<td>10,024</td>
</tr>
<tr>
<td>Suffolk (about 70 Signet clients)</td>
<td>26,559</td>
<td>721</td>
<td>5,580</td>
<td>4,558</td>
</tr>
<tr>
<td>Hampshire Down (about 60 Signet clients)</td>
<td>3,225</td>
<td>174</td>
<td>1,288</td>
<td>814</td>
</tr>
<tr>
<td><strong>LLEYN</strong></td>
<td>18,195</td>
<td>48</td>
<td>15,346</td>
<td>5,399</td>
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<tr>
<td><strong>COMPOSITE</strong></td>
<td>7,381</td>
<td>15</td>
<td>4,992</td>
<td>2,675</td>
</tr>
<tr>
<td><strong>CHAROLLAIS</strong></td>
<td>6,207</td>
<td>58</td>
<td>4,464</td>
<td>2,626</td>
</tr>
<tr>
<td><strong>DORSET</strong></td>
<td>4,823</td>
<td>20</td>
<td>3,830</td>
<td>1,704</td>
</tr>
<tr>
<td><strong>SCOTCHBLACKFACE</strong></td>
<td>4,311</td>
<td>19</td>
<td>3,441</td>
<td>2,645</td>
</tr>
<tr>
<td><strong>EASYCARE</strong></td>
<td>3,309</td>
<td>7</td>
<td>2,605</td>
<td>857</td>
</tr>
<tr>
<td><strong>WELSH MOUNTAIN</strong></td>
<td>2,902</td>
<td>8</td>
<td>2,178</td>
<td>1,103</td>
</tr>
<tr>
<td><strong>ROMNEY MARSH</strong></td>
<td>2,293</td>
<td>4</td>
<td>1,717</td>
<td>1,491</td>
</tr>
<tr>
<td><strong>BLUEFACED LEICS</strong></td>
<td>1,541</td>
<td>27</td>
<td>1,067</td>
<td>1,000</td>
</tr>
<tr>
<td><strong>MEATLINC</strong></td>
<td>1,332</td>
<td>7</td>
<td>1,078</td>
<td>991</td>
</tr>
<tr>
<td><strong>NORTH COUNTRY CHEVIOT PARK</strong></td>
<td>1,120</td>
<td>10</td>
<td>942</td>
<td>457</td>
</tr>
<tr>
<td><strong>BEULAH</strong></td>
<td>1,118</td>
<td>5</td>
<td>876</td>
<td>600</td>
</tr>
<tr>
<td><strong>SHROPSHIRE</strong></td>
<td>1,043</td>
<td>20</td>
<td>892</td>
<td>621</td>
</tr>
<tr>
<td><strong>SOUTHDOWN</strong></td>
<td>841</td>
<td>15</td>
<td>654</td>
<td>565</td>
</tr>
<tr>
<td><strong>NORTH COUNTRY CHEVIOT HILL</strong></td>
<td>805</td>
<td>4</td>
<td>690</td>
<td>463</td>
</tr>
<tr>
<td><strong>WILTSHIRE HORN</strong></td>
<td>734</td>
<td>11</td>
<td>618</td>
<td>336</td>
</tr>
<tr>
<td><strong>BELTEX</strong></td>
<td>677</td>
<td>12</td>
<td>567</td>
<td>496</td>
</tr>
<tr>
<td><strong>Plus more smaller breeds</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Grand Total:</strong></td>
<td>149,312</td>
<td>2,525</td>
<td>65,387</td>
<td>40,143</td>
</tr>
</tbody>
</table>
Expanding breeds

- Texel
- Lleyn
- Romney
- Composite shedders
Strong Pedigree Sales

10% Index vs. Average

- Charollais Premier +£600/ram
- Texel Welsh +£360/ram
- Texel Scottish +£1,800/ram
- Texel English +£400/ram
- Dorset May Fair +£500/ram (vs. sale average)
Proportion of recorded rams for sale at Builth Wells

- Charollais 37%
- Texel 32%
- Suffolk 16%
- Hampshire Down 39%
- BFL 16%
- Lleyn 58%
- Welsh Mountain 13%
Leading showring sheep also had high EBVs

- BFL – Builth Wells
- Charollais – Premier Sale
- Hampshire Down
- Suffolk – Royal Highland
New Marketing Initiatives

• Poll Dorset – New sale Launched
• Worcester – Mixed breed Sale
• Maternal Sheep Group – Website
• Southdown - Website
Ram Selection Days

- Lleyn
- Wiltshire Horn
- Exlana
- Meatlinc
Recording Hill Sheep

- Membership reducing as funding (HISS, NUSS and WSS) all finished
- Hard core of breeders remain
- Extra effort will be required in terms of technology transfer from levy bodies if these breeding groups are to grow
  - New Welsh Mountain Breeding Scheme launched

Find photo of recorded Swaledale
Suffolk Perception “recording not finding good sheep”

Trial set up. Three unrecorded flocks and three recorded flocks used a “good ram” (with no EBVs)

The “good” ram now in bottom 1% of breed for Muscle Depth EBV
Lleyn

• Numbers recording are very high
  – 53% of Builth Wells entries recorded
• SRS is numerically small, but important
  • Linkage is a concern
• Some Maternal Ability EBVs are moving
  – R&D trying to address this challenge
• Series of meetings completed
Breeding Service Update
CT Scanning Service

533 commercial lambs (331 Edinburgh and 202 mobile) and 612 trial lambs
# EBLEX Ram Linkage Scheme

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<tbody>
<tr>
<td>Nominated rams</td>
<td>46</td>
</tr>
<tr>
<td>Successful rams (semen collected)</td>
<td>5</td>
</tr>
<tr>
<td>Number of semen straws collected</td>
<td>1750</td>
</tr>
<tr>
<td>Recorded progeny produced</td>
<td>619</td>
</tr>
<tr>
<td>Number of recorded flocks with progeny</td>
<td>32</td>
</tr>
</tbody>
</table>

Run by **Dylan Laws**, EBLEX Scientist
New BRP Publications

Marketing Breeding Sheep for Better Returns

Buying a recorded ram to generate Better Returns
Main source of reports, technical updates and news

Twitter
@SamBoonBreeding

Flickr

Webinars (future)
Print your own charts

Print Sale Charts On-line

By Samuel Boon, Signet Breeding Services

rams breeders and rams buyers can now print Signet’s Standard Sale Charts directly from the internet for 28 of the breeds of sheep that record with Signet Breeding Services.

STEP 1 Log onto the internet and type “Signet Breeding Services” into your search engine

STEP 2 Open the Signet site and click the blue icon within the ‘Sheepbreeder’ section – ‘EBV Search’

STEP 3 In the “All breeds quick search” box, type the ear number or name of the sheep of interest

STEP 4 Select the sheep record you wish to view and after clicking on this icon, scroll to the EBV information, click on the bar chart icon (not the printer icon)

STEP 5 The now chart will appear in a separate window. Go to “File” and “Save As...” (to save the image) or “Print”

Lot: 1 DRINKSTONE TOP SCORE 10 Y68:11
Sire: DRINKSTONE HEAVY WEIGHT Y68:8
Dam: Y68:K4
Ultrasound Scanned: Yes
Date of Birth 03/01/2010

<table>
<thead>
<tr>
<th></th>
<th>EBV</th>
<th>Acc</th>
</tr>
</thead>
<tbody>
<tr>
<td>Litter Size</td>
<td>0.61</td>
<td>39</td>
</tr>
<tr>
<td>Maternal Ability</td>
<td>1.01</td>
<td>37</td>
</tr>
<tr>
<td>8 Week Weight</td>
<td>7.82</td>
<td>83</td>
</tr>
<tr>
<td>Scan Weight</td>
<td>13.06</td>
<td>84</td>
</tr>
<tr>
<td>Muscle Depth</td>
<td>7.20</td>
<td>86</td>
</tr>
<tr>
<td>Fat Depth</td>
<td>0.69</td>
<td>85</td>
</tr>
<tr>
<td>T. Sire Index</td>
<td>6.33</td>
<td>86</td>
</tr>
<tr>
<td>Below Average</td>
<td></td>
<td></td>
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<tr>
<td>Above Average</td>
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</tbody>
</table>
Presentation of Fat Depth EBV

• Recognised that there is an optimum fat depth – varies with breeds/farms
• Presentation on charts is constantly discussed
• Charolais and Limousin cattle are flipping the chart
• Proposal that the presentation of all Signet sheep and beef charts is changed from 1\textsuperscript{st} January
Ram with a low Fat Depth EBV
Ram with a high Fat Depth EBV
Download your own EBVs

Downloading Flock EBVs from the Internet

These instructions show breeders how they can download EBVs for their flocks from the Internet.

1). Go to the BASCO Websearch.
http://www.egenes.co.uk/bascosearchsheep/
And click on BREEDER SEARCH
Electronic File Upload

- BADUT
- Working for
  - Lambing information
  - Calving information
  - Lamb weights
  - Retagging and census work
  - Ewe mature weights
On-line Data Entry

• Service already exists for Texel breeders
• Next step to enable Signet breeders to enter data on-line
  • Signet negotiating with BASCO for access
• Breeders using the service must have a Flockbook Number that is based on UK tag
R&D work completed by EGENES

- Index work
  - Suffolk, Texel, Dorset, Vendeen, BFL
- Model work
  - Hampshire Down
- New groups/breeds
  - Welsh Mountain, Exlana, Blue Texel
- Investigations
  - Texel Litter Size EBVs
  - Inbreeding
On-going R&D

• Genetic Parameter Review
  – All breeds
  – Lleyn and Dorset first

• New Traits
  – Maternal Ability – new method
  – Litter Size – Born and Reared
R&D on the horizon

• Major projects
  – Ewe longevity
  – Lamb survival

• Connectedness

• New management groups

• Inbreeding
Competitions and Funding

FEATURED: £70m Agri-Tech Catalyst Competition
Do you have an idea for a collaborative project which could improve the agri-tech sector? Accelerate your idea towards commercialisation with phased funding from Agri-Tech Catalyst. Deadline for registration: 4 Dec 2013. Deadline for applications: 11 Dec 2013.

FEATURED: £5.5m Funding Competition for Animal Health Research
The BBSRC Animal Health Research Club (ARC) is inviting eligible organisations to submit proposals that address the important research challenges identified by the ARC. BBSRC will host a workshop to promote the call on 31 Oct 2013 in London. Deadline for outline proposals: 11 Dec 2013.

FEATURED: £13m Competition for Engineering Solutions to Enhance Agri-food Production