



Monitoring sheep breed changes in Britain over 40 years: breed choice responds to economic and political pressures

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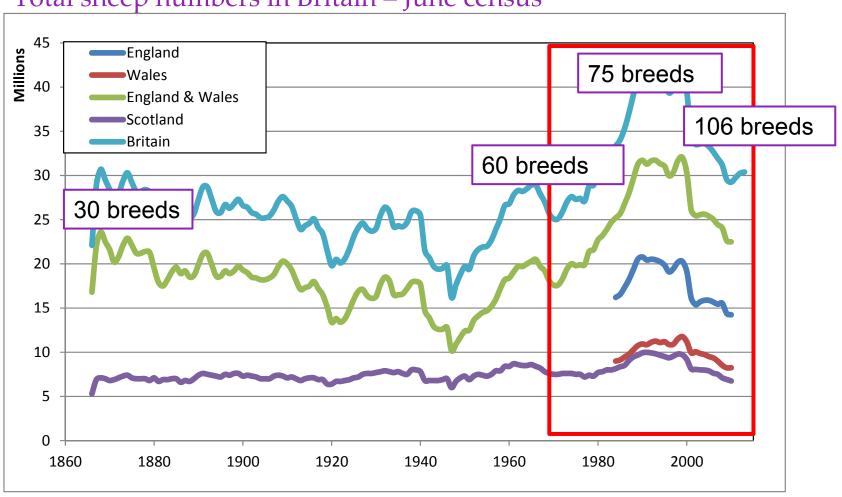
Department of Production and Population Health

Monitoring sheep breed use in Britain

- > Annual Census data collected in June and December by 'ministry'
- ➤ No information on sheep breeds or matings
- ➤ In 1970, the newly formed Meat and Livestock Commission (MLC) set up study groups to determine technical direction of improvement programmes in each meat species
- No comprehensive information was available on sheep breeds in Britain initiated 1st postal survey at mating 1971
- ➤ Subsequent surveys carried out in 1987,1996, 2003 and 2012

The last 40 years in context

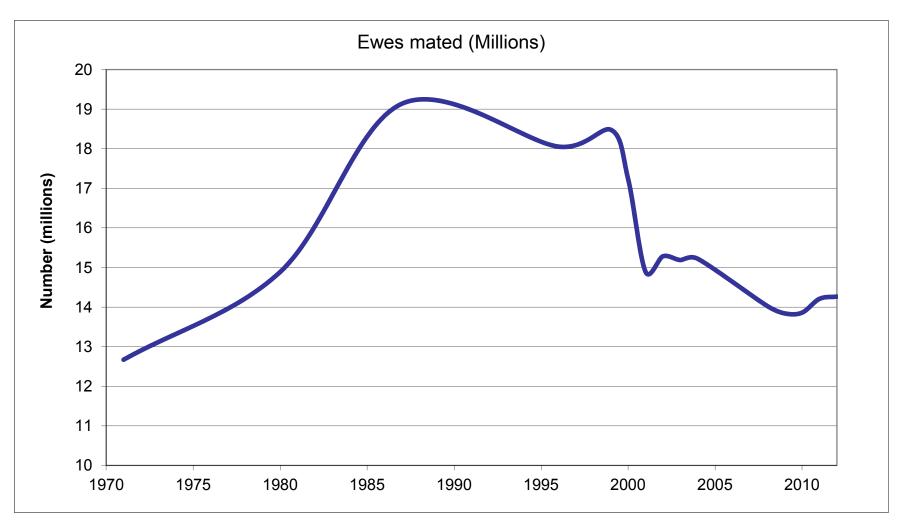
Total sheep numbers in Britain – June census



Economic/political changes – last 40 years

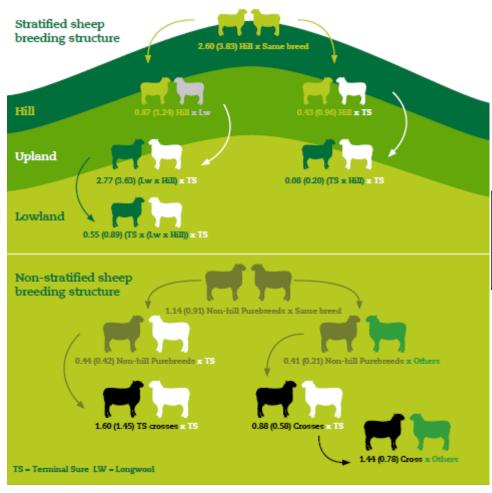
- ➤ New markets EU, Asia
- ➤ Less competition New Zealand
- ➤ Subsidies from EU increase followed by decrease
- > Foot and mouth disease
- ➤ Consumer pressure less fat larger cuts of meat
- > Profitability of sheep and competing enterprises

Demographic changes – breeding ewes





A structure of two halves

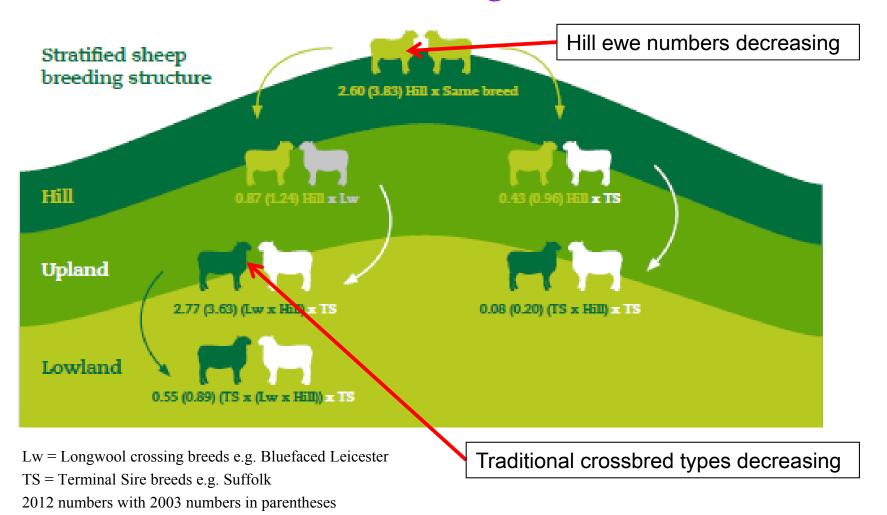


% split between the two structures

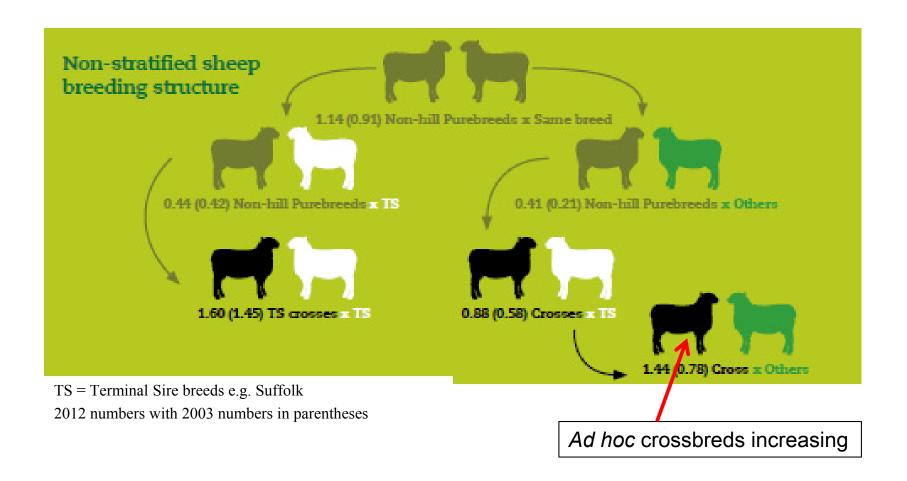
| 1971 | 1987 1996 2003 | | 2003 | 2012 | |
|------|----------------|----|------|------|--|
| 86 | 78 | 77 | 71 | 56 | |
| 14 | 22 | 23 | 29 | 44 | |

2012 numbers with 2003 numbers in parentheses

Traditional crossbreeding structure

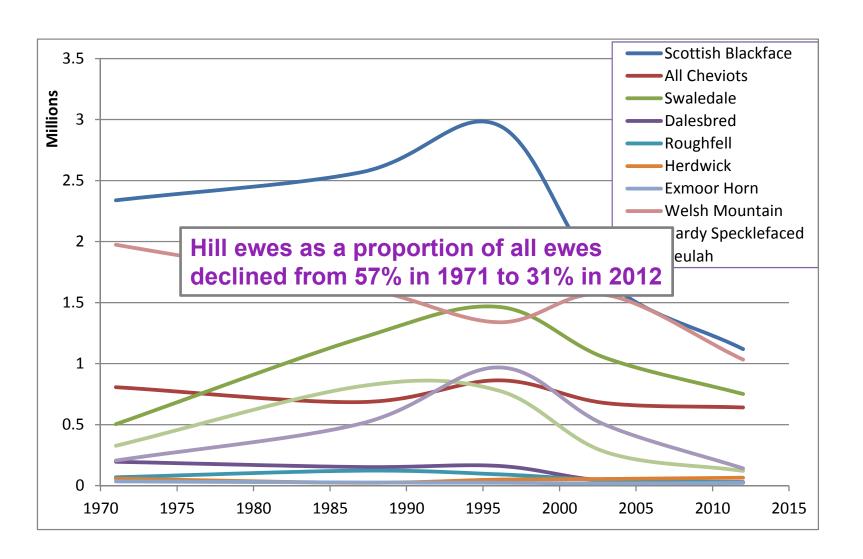


A growing structure





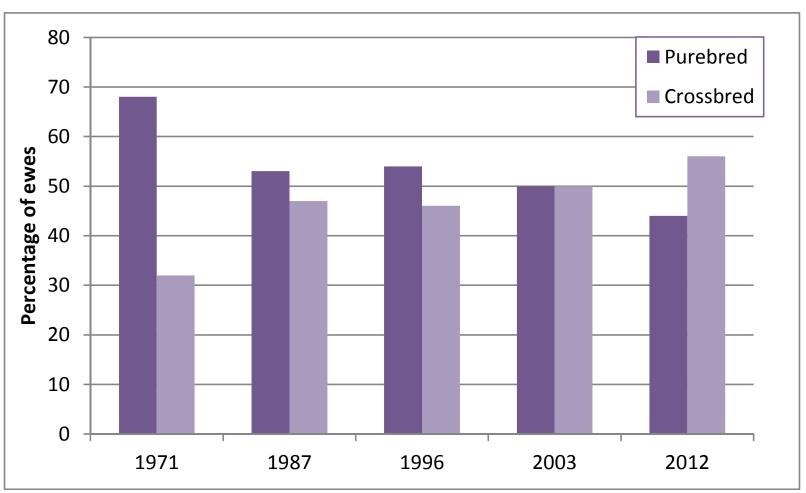
Changing hill breed numbers



Disappearing purebreds? (000)

| | 1971 | 1987 | 1996 | 2003 | 2012 |
|-----------------------------|-------|------|------|------|------|
| Border Leicester | | 28 | 13 | 5 | 4 |
| Romney Marsh | 294 | 217 | 159 | 165 | 201 |
| Devon Closewool | | 51 | 6 | 7 | 4 |
| Devon and Cornwall Longwool | 290 | 28 | 4 | 2 | 2 |
| Whitefaced Dartmoor | 39 | 1 | 6 | 5 | 4 |
| Greyfaced Dartmoor | 33 | 4 | 3 | 4 | 4 |
| Clun Forest | 401 | 124 | 44 | 12 | 10 |
| Dorset Horn | 59 | 124 | 17 | 12 | 11 |
| Kerryhill | 209 | 47 | 2 | 13 | 10 |
| Llanwenog | 20 | 3 | 10 | 6 | 7 |
| Total | 1,492 | 646 | 273 | 247 | 273 |

The rise of the crossbred





Britain - Source: MLC/Defra/EBLEX Sheep Breed Surveys

Changes in traditional crossbred types (000)

| | 1971 | 1987 | 1996 | 2003 | 2012 |
|------------------------|-------|-------|--------------|-------|-------|
| North Country Mule | 311 | 3,233 | 3,809 | 1,915 | 2,094 |
| Welsh Mule | | 370 | 631 | 738 | 330 |
| Scots Mule | | 502 | 263 | 610 | 231 |
| Greyface | 214 | 332 | 156 | 212 | 90 |
| Welsh Halfbred (HB) | 304 | 410 | 250 | 130 | 28 |
| Scottish Halfbred | 590 | 346 | 162 | 100 | 19 |
| Masham | 406 | 249 | 162 | 56 | 32 |
| Suffolk x Mule/HB type | 550 | 603 | 495 | 590 | 622 |
| Texel x Mule/HB type | 0 | 32 | 220 | 307 | 862 |
| Suffolk x Hill | 154 | 182 | 115 | 81 | 154 |
| Texel x Hill | 0 | 25 | 28 | 92 | 76 |
| T-4-1 | 2.520 | (204 | <i>(</i> 201 | 4 021 | 4.520 |
| Total | 2,529 | 6,284 | 6,291 | 4,831 | 4,538 |



Overall breed number changes in 40 years

| Year | UK | Imported | Newly imported | Lost imported | Compo sites | New comp osites | Lost compo sites | Total |
|------|-----|----------|----------------|------------------|----------------|-----------------|------------------|-------|
| 1971 | ~50 | 1 | | | 1 | | | ~52 |
| 1987 | 58 | 1 | 8 | 0 | 1 | 5 | 0 | 73 |
| 1996 | 58 | 7 | 6 | 2 | 4 | 0 | 2 | 75 |
| 2003 | 58 | 13 | 10 | 0 | 4 | 3 | 0 | 88 |
| 2012 | 59 | 18 | 20 | 5 | 5 | 4 | 2 | 106 |
| | | | 44 | | | 12 | | |

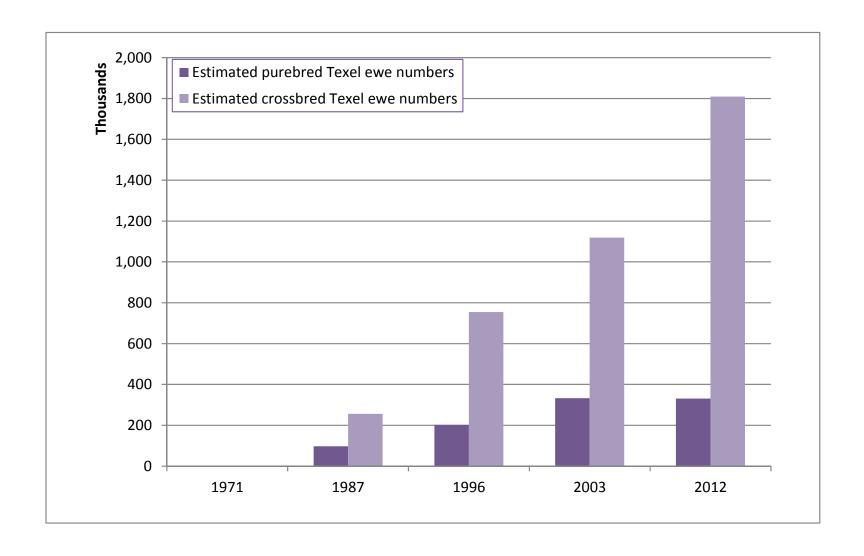
44 breeds imported over 40 years

- 7 not found in 2012

 \sim 545,000 ewes of imported breeds found in 2012

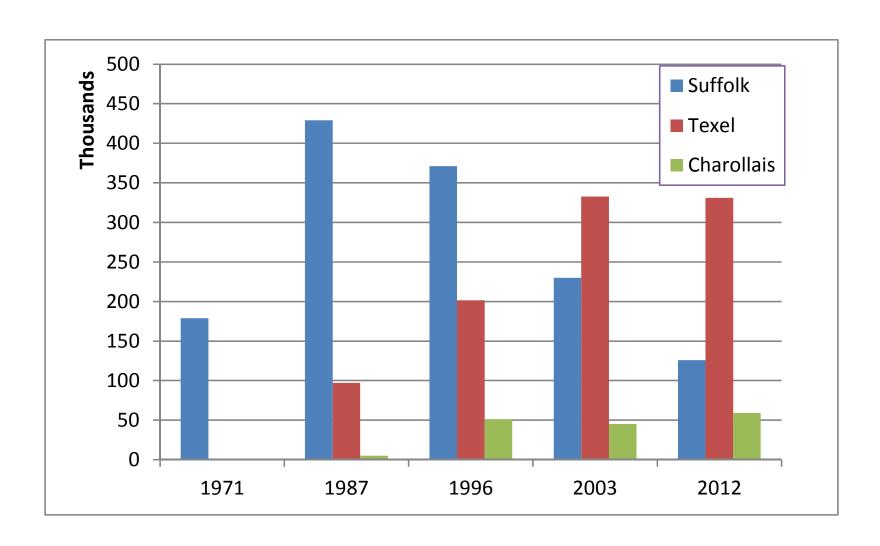
~ 20% of all non-hill ewes

The rise of the Texel ewe



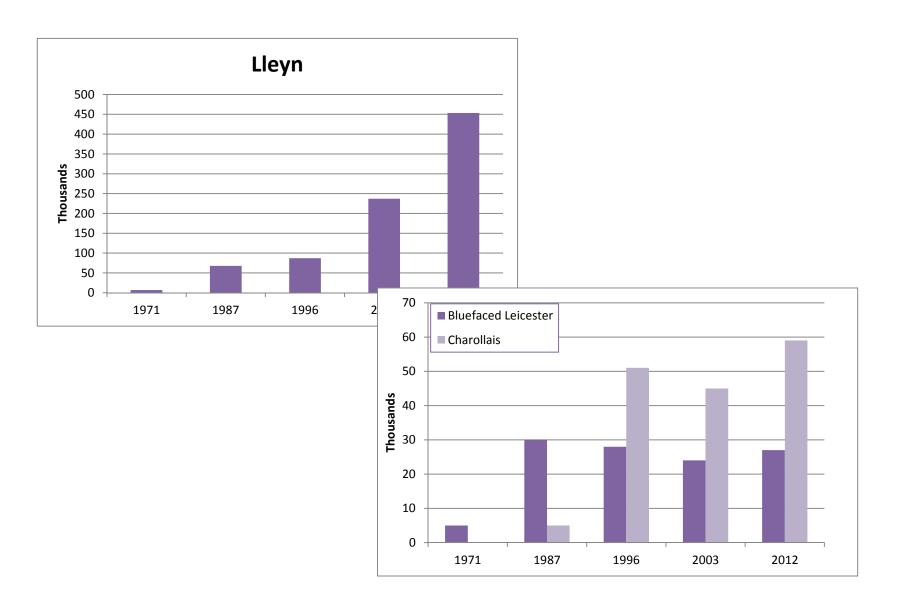


Terminal sire purebred ewe numbers





A move towards more efficient sheep?





Conclusions and discussion points

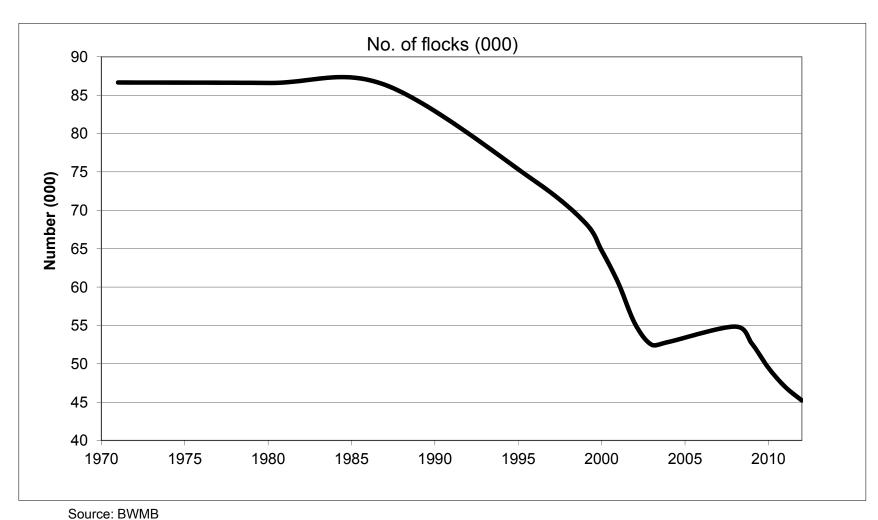
- > Stratified crossbreeding structure still found
- ➤ Balance shifting towards crossbreds
- Many 'ad hoc' crossbreds
- ➤ New breeds and composites still appearing
- > Breeds with real traits to offer find a place

Acknowledgements



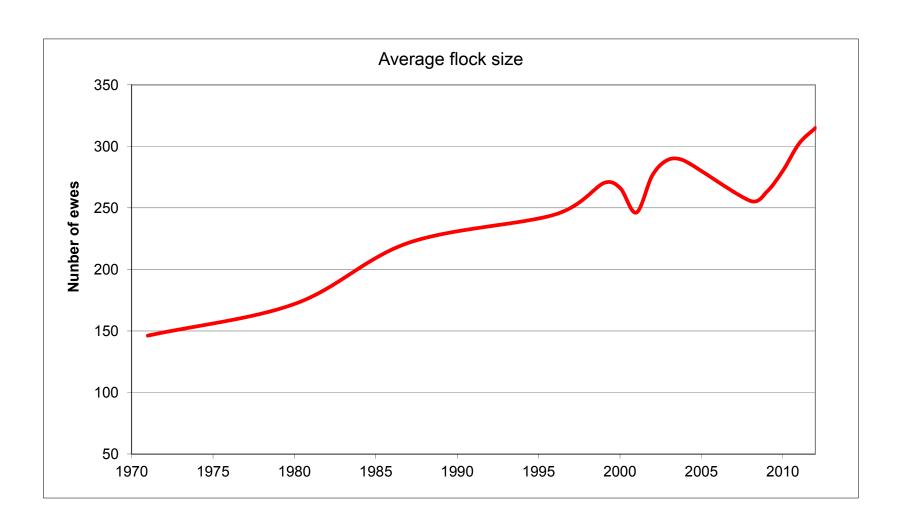
English Beef and Lamb Executive – for funding and carrying out 2012 Sheep Breed Survey

Demographic changes - flocks



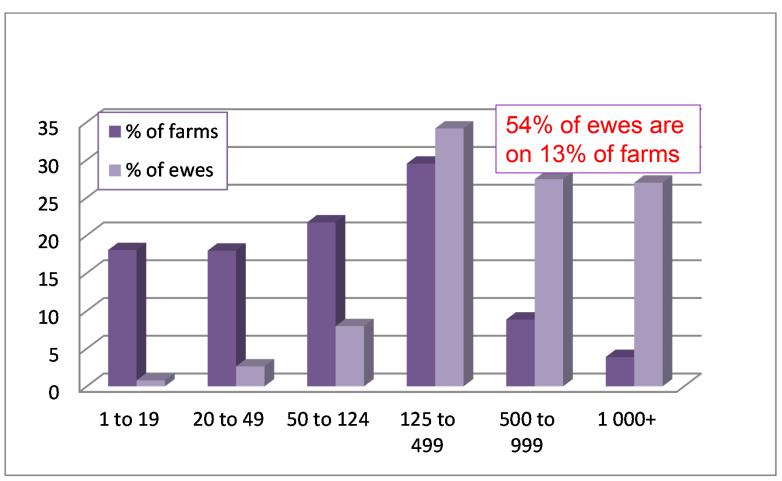


Demographic changes – Average flock size





Distribution of ewes and farms by breeding flock size





UK - Source: Defra June census 2012