

Introduction to UK sheep sector – challenges and opportunities

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Outline

- Sheep industry structure
- Recording for breed improvement
- Production and consumption
- Changing consumer demand
- Wider challenges and opportunities

UK sheep sector



Terminal Sire



Maternal breed (hill) X Longwool crossing



Maternal breed (lowland)



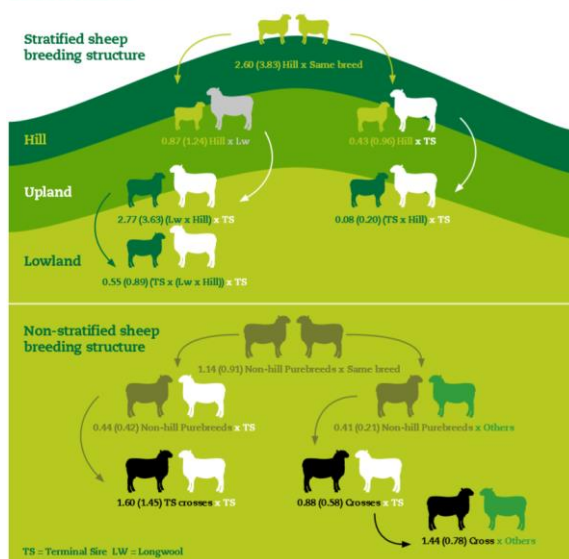
Crossbred maternal ewe

AHDB

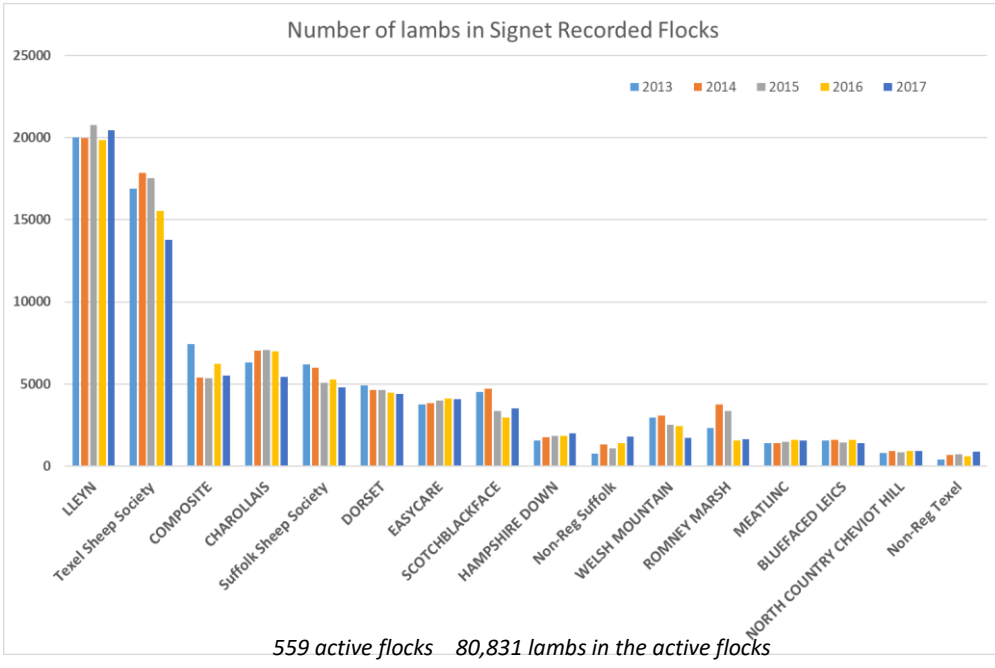
Changes in sheep breeds 1971 - 2012

Shift from purebred matings (44%) to cross bred (56%)

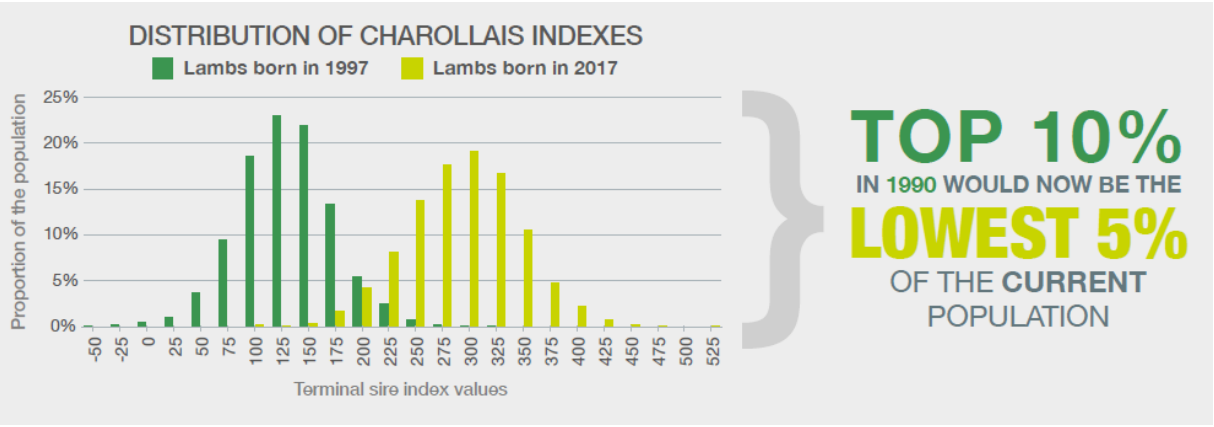
Figure 2. Crossbreeding pattern of the major ewe types (million) with 2003 figures shown in brackets.



<http://www.signetfbc.co.uk/wp-content/uploads/2014/11/the-breeding-structure-of-the-british-sheep-industry-2012-180914.pdf>



Genetic change in UK sheep breeds



Measuring carcass attributes



Computed Tomography and the release of new CT derived EBVs

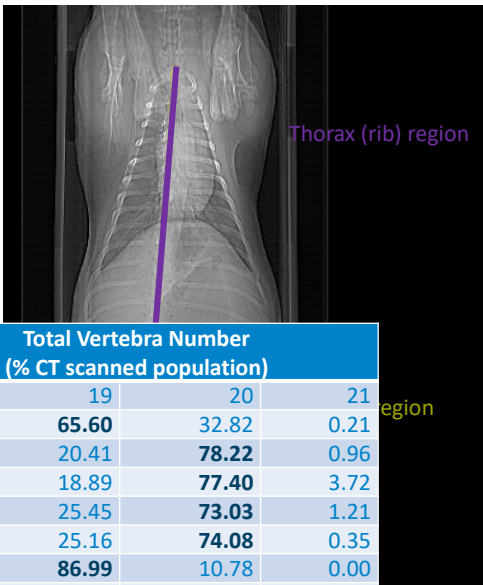


Already assess:

- CT Lean Weight
- CT Fat Weight
- CT Gigot Muscularity



Spine
measurement
from CT
longitudinal scan



		Total Vertebra Number (% CT scanned population)			
Breed	Count	18	19	20	21
Texel	2846	1.37	65.60	32.82	0.21
Suffolk	1460	0.41	20.41	78.22	0.96
Hampshire Down	323	0.00	18.89	77.40	3.72
Meatlinc	660	0.30	25.45	73.03	1.21
Charollais	1435	0.42	25.16	74.08	0.35
Beltex	269	2.23	86.99	10.78	0.00
Blue Texel	9	0.00	66.67	33.33	0.00

region



- Ewe Fertility
- Longevity
- Age at first lambing
- Lambing interval



Parasite resistance

Faecal Egg Count
Strongyles
Nematodirus

Saliva IgA

Serum IgA

The future

New phenotypes – feed intake / meat eating quality



Technically efficient farms – Times are changing



In the UK we are (fairly) good at producing high output breeding lines in the lowlands and regionally adapted strains in the uplands

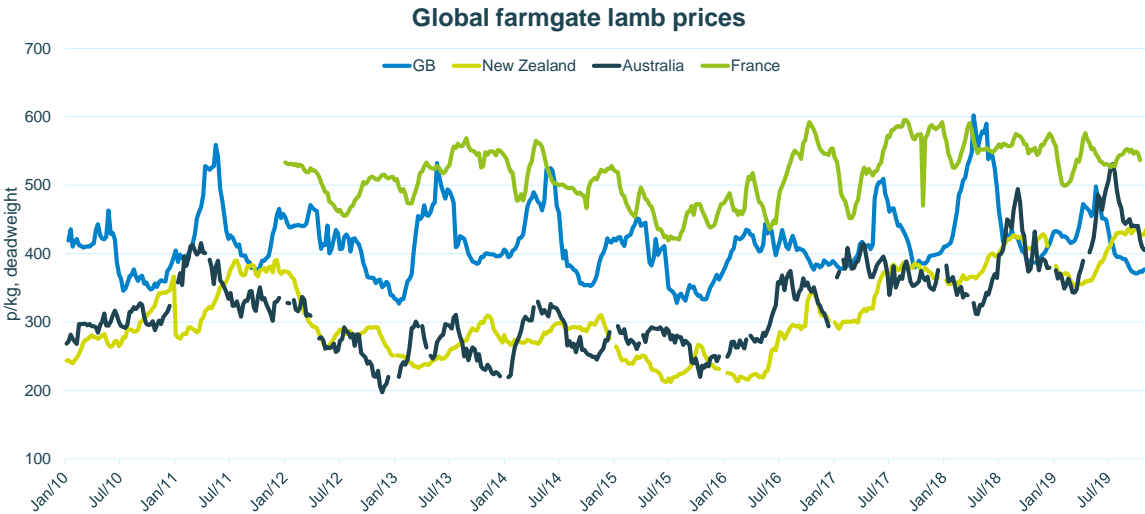
In a very general sense we can see breeding objectives changing to embrace

1. Lambing outdoors.
2. Utilizing “poorer” land (at a lower cost)
3. Using “easier care” ewe breeds – with lower labor requirement

Testing animals under commercial conditions

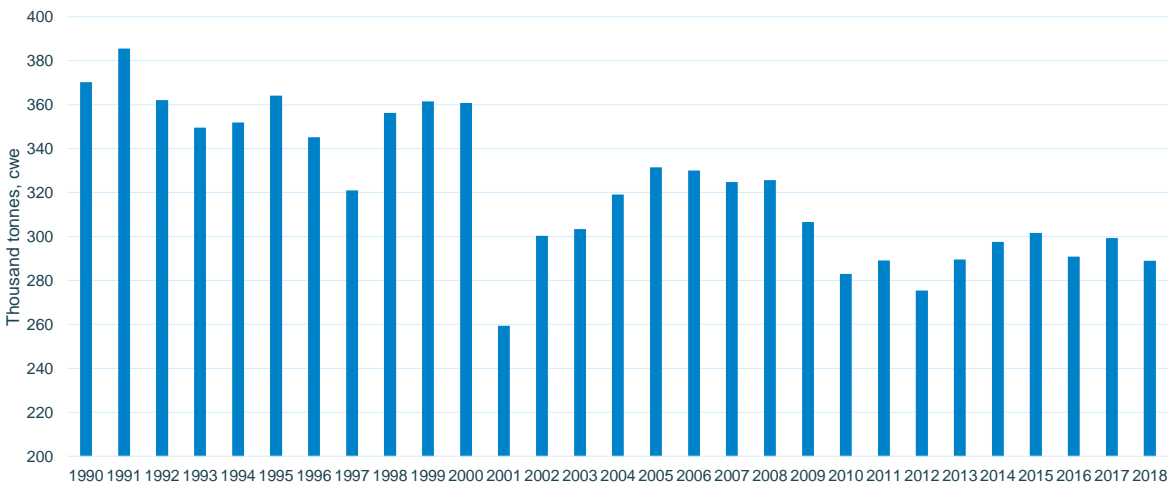


Tight global market pushes AUS/NZ prices up



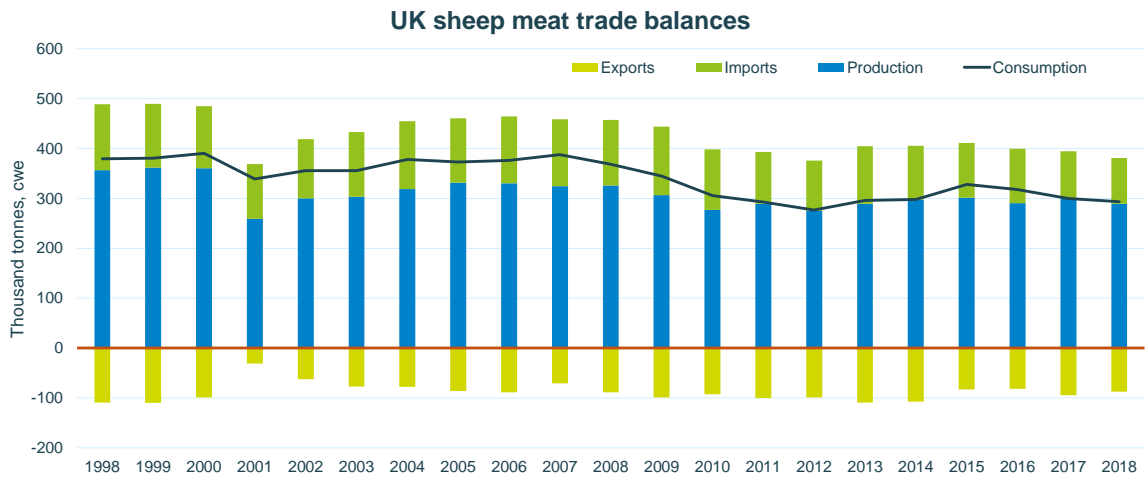
Source: AHDB, European Commission, MLA's NLRS, NZ AgriHQ

UK sheep meat production



Source: Defra

UK sheep meat trade balances



Source: Defra, HMRC

Lamb Barriers to Purchase



- Cost
- Cooking knowledge
- Fatty Perceptions
- Lack of versatility

Marketing Strategies Summary

- Increase versatility perceptions
- Communicate ease of cooking
- Overcome negative health perceptions
- Position in midweek meal occasions
- Appeal to younger consumers

Challenges and opportunities

- Genetics
- New data sources
- Artificial intelligence
- Precision approaches
- Land use:
 - Forage areas
 - Livestock in arable systems
 - Maintaining landscape



NFU the voice of British farming

Environment

Health
(human diet)

Animal
Health &
Welfare



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