

Summary of Best Management Practices Applicable to British Wool



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This document summarises the husbandry, health and environmental standards to which British wool is produced.

Introduction

The History of Sheep Keeping in the UK and the Role of Wool in our Cultural Heritage

Sheep keeping and indeed wool production have been a significant part of the UK's agricultural industry over thousands of years. Sheep's wool has been widely available for generations; it can be made into carpets and into a durable fabric that provides warmth from the cold, wind and rain.

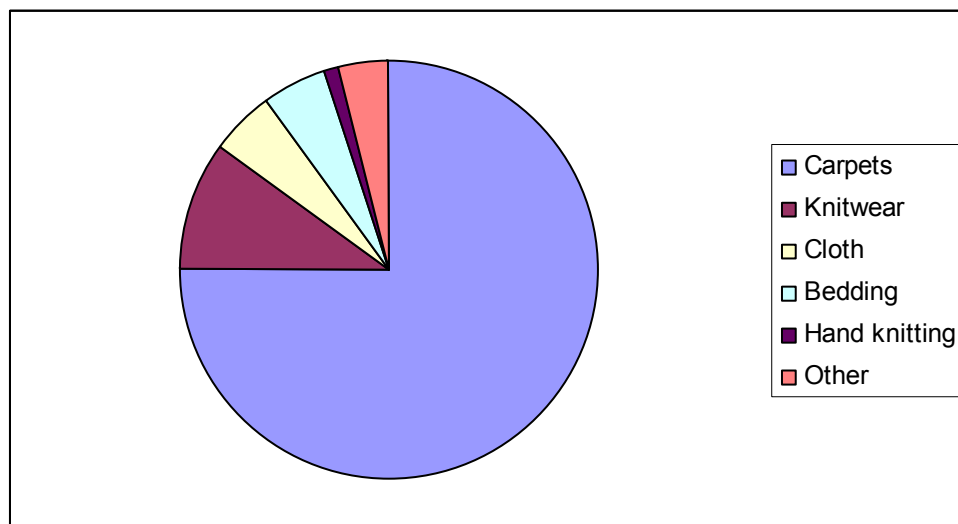
The Saxon invasion of England in the 5th century almost destroyed the wool industry but in medieval England, wool was in great demand. Between the late 13th and late 15th century wool became the backbone and driving force of the English medieval economy. Landowners would count their wealth in terms of sheep numbers. Successive monarchs taxed the wool trade heavily and the first to do this was King Edward I (1272 – 1307). It is claimed that he taxed the wool industry in order to fund his military endeavours.

Wool production was not confined to England, as Wales and Scotland also recognised the financial benefits of the trade. Between 1750 and 1850 'Highland Clearances' took place. Landowners converted all the arable land to grassland in order to keep sheep and increase the amount of wool produced in Britain.

Today the UK is the 7th largest wool producing country in the world exporting around a third of the annual clip. The 2008 clip finalised at around 31.2 million kilograms. This was divided by wool type into: Lowland (30%), Hill (18%), Mountain (20%) Cross & Lustre (29%) and others (3%)

British Wool is sold and manufactured into a range of products. See Figure 1 below:

Figure 1: Fate of British Wool



Source: British Wool Marketing Board

The British Wool Marketing Board (BWMB) recognises seven main groups of wool. These are shown in the table below along with a selection of the many breeds of sheep kept in the UK:

Table 1: Wool groups and associated sheep breeds

Type of wool	Fine	Medium	Cross	Hill	Mountain	Naturally Coloured	Lustre
Typical breeds	Ciun Forest, Dorset Down, Dorset Horn, Shropshire, Oxford, South Down, Suffolk	Lleyn, Texel, Romney, Border Leicester, Halfbreeds	Welsh Mule, Greyface, North of England Mule	Beulah, Hill Radnor, Gritstone, Lonk, Cheviot	Blackface, Swaledale, Rough Fell, Welsh Mountain	Black Welsh, Herdwick, Shetland Moorit, Jacob	Lincoln Longwool, Wensleydale, Devon & Cornwall, Blue Face Leicester
Micron range	29-35	31-35	29-33	30-33	35+	30-35+	26-35+
Main end uses	Fine cloths & tweeds, felts, futons & hand knitting	Apparel, hand knitting, tweeds & carpets	Carpets & knitwear	Fine tweeds, apparel, flannels & carpets	Hand knitting, tweeds & carpets	Carpets & knitwear	Fine lustrous yarn, knitwear, carpets & woven apparel

Stratification of the Sheep Industry in the UK

The UK has 85 recognised breeds of sheep (National Sheep Association (NSA)) with particular breeds adapted to specific environments. The diverse landscape of the UK ranges from the mountains of Scotland and Wales to the lush lowland pastures of the South West of England. The movement of these sheep breeds between the different environments, hill to lowland, is known as stratification. This stratification is unique and has evolved over many years.

On the hills, hardy hill and mountain sheep are kept, mostly as pure breeds as they are well adapted to the harsh conditions of these rugged parts of the UK. Lambs not retained as replacements are transferred to the lowlands to fatten. Older hill and mountain ewes are transferred to the kinder upland environment further down the hill and crossed with a longwool breed to produce breeding stock (Mules and half-breds) for the uplands and lowlands. Lowland breeds and Mule ewes are then crossed with a terminal sire to produce finished lamb.

Breeding sheep are traditionally shorn in late spring and early summer (May through to July) when ambient temperatures rise. Shearing helps to reduce heat stress and the incidence of skin parasites during warmer weather. Wool yield per sheep varies according to breed but ranges from about 2 to 5 kg.

Role of Sheep Farming in Landscape Management

Sheep are an integral part of the natural environment of the UK. Sheep graze the hills, dales and mountains helping to preserve the natural habitat for wildlife and plants in these harsh and often remote areas of land. Sheep are also important in lowland areas making good use of marginal grazing areas often in rotation with beef cattle, dairy cows and arable farming. The mosaic of small fields and crop types, hedges, stone walls and small rural communities of the UK have been developed around cattle and sheep farming and livestock farming is largely responsible for the unique character of the UK landscape.

Standards of Production

Wool in the UK is produced to meet high standards of animal health and welfare and production is regulated by a wide range of environmental protection and animal welfare measures.

1. Protection and enhancement of environmental quality and natural resources

The UK is divided into four countries (Scotland, Wales, England and Northern Ireland), all of which operate slightly different environmental schemes, each tailored to meet the environmental challenges of the region. The objectives of the schemes are to encourage farming practices that are in harmony with nature and to manage and conserve the land with a focus on maintaining existing and creating new habitats for wildlife and protecting the landscape.

In the UK there is a 'Code of Practice for the Protection of Soil, Water and Air'. This code describes the main risks of pollution from different agricultural sources. It helps farmers to minimise the risk of agricultural pollution whilst protecting natural resources, and allowing economic production.

The Single Payment Scheme (SPS) is the principal agricultural support scheme in the UK and indeed in the European Union. Under this scheme support is not linked to production but to environmental farming practices. Adherence to scheme rules is essential and standards are maintained through '**cross compliance**' (i.e. farmers do not receive payments unless they meet all the necessary standards).

Cross compliance includes two requirements:

- Statutory Management Requirements (**SMR's**) - specific European legal requirements
- Good Agricultural and Environmental Conditions (**GAEC's**) - domestic legal requirements

Statutory Management Requirements

Regulations relate to environmental; public, plant and animal health; and animal welfare. 1% of farms are inspected annually by the relevant Competent Control Authority (e.g. The Rural Payments Agency (RPA), Environment Agency (EA), Animal Health and Veterinary Medicines Directorate).

The main SMR's that are relevant to wool production include sheep identification and animal welfare.

Good Agricultural and Environmental Conditions

The GAEC measures provide a baseline of environmental protection for soils, habitats and landscape features.

Avoiding overgrazing and unsuitable supplementary feeding is a requirement of GAEC's. Over grazing is not a common problem seen in the UK due to the relatively low stocking rates especially on higher land. Supplementary feeding largely happens in the winter and early spring months and feeding sites are moved frequently to reduce damage to soil structure and sensitive flora. Very few heavy vehicles are used to transport supplementary feed in sheep systems.

Livestock have access to water from natural sources – from rivers, streams and ditches or water is piped to fields direct from the mains supply or from rainfall water. In some areas rivers are fenced off from livestock to avoid soil erosion of river banks and direct pollution from the livestock.

An Environmental Impact Assessment (EIA) is required if a farmer wishes to change permanent pasture (uncultivated and semi-natural land) to another land use. This aim is to preserve permanent pasture and eliminate the risk of destroying habitats for sensitive species.

2. Transport of animals

The EU Welfare in Transport Regulation which came into force in January 2007 requires that transporters and handlers of sheep undertake training in the relevant technical provisions of the Regulation. This covers: fitness of the animals for travel; the means of transport; loading, unloading and handling; watering and feeding intervals; journey times and rest periods; space allowances; and documentation.

3. Use of veterinary medicines

The health and welfare of sheep in the UK is paramount to the industry. Any veterinary medicines administered aim to reduce and/or prevent the incidence of disease in the UK sheep flock. Wool production itself requires very little chemical use and is confined to remedies that protect the sheep from skin parasites.

The Responsible Use of Medicines in Agriculture Alliance (RUMA) guidelines are designed to give guiding principles that can be used by sheep producers in the management of their flocks.

Sustainable Control of Parasites in Sheep (SCOPS) was launched to promote the responsible use of anti-parasitics. This encourages focussed use of veterinary medicines for diagnosed problems and is helping to preserve the range of anti-parasitic medicines available to sheep farmers.

Sheep in the UK are often protected from skin parasites by pour-on or injectable medicines and by sheep dipping. It is an offence to buy or use sheep dip unless it is done by, or under the supervision, and in the presence of, a person who holds a 'Certificate of Competence for The Safe Use of Sheep Dip'. There are also strict controls over the disposal of sheep dip to reduce any threat of environmental pollution.

Sheep farmers must keep the following records in respect to the purchase and use of all animal medicines:

- Name of product and batch number
- Date of purchase and administration
- Quantity purchased and administered
- Withdrawal period
- Identification of the animals treated
- Date of disposal, quantity and how and where it was disposed

Records must be kept for a minimum of 3 years and these records will be checked by the relevant authority.

4. Reduce release of greenhouse gases (nitrous oxide, methane and carbon dioxide)

The Climate Change Act 2008 passed in November 2008 introduces the world's first long term legally binding framework to tackle the dangers of climate change. A key provision of the act is a legally binding target of at least 80% reduction in GHG emissions by 2050, also a reduction of 34% by 2020. These targets are against a 1990 baseline.

In order to help the UK government achieve its targets for GHG reductions the sheep industry will need to improve efficiency of production by 11% in the next ten years. The sheep industry is striving to achieve this through improved feed efficiency (type and quality of feed), improved fertility and longevity.

The English Beef and Lamb Executive (Eblex), a farmer levy funded organisation in England (along with similar organisations in Scotland, Wales and Northern Ireland) is helping producers to improve the efficiency of lamb and wool production by knowledge transfer and promotion of best practice.

5. Reduce reliance on non-renewable resources and increase the use of renewable resources and energy

UK sheep farming is based on the conversion of forage in the form of grass or other forage crops into meat and fibre. Sheep graze large areas of the hills and uplands that are not suitable for other cropping and are part of the 'natural ecosystem'. The utilisation of the land in this way helps to maintain a wide and diverse wildlife population and to maintain the UK landscape. Sheep use the natural and farmed environment to convert plant energy into wool and meat. Only where our climate or soils dictate, are supplements given to sheep to preserve their health and well being.

Due to the largely extensive nature of sheep farming the industry does not use large amounts of fossil fuels or machinery. Machinery is mainly used to conserve forage for the winter months.

6. Diversify crops (including livestock) and cultural practices to enhance the biological and economic stability of the farm

Typical sheep farms in Britain are either dedicated to sheep production but often run in conjunction with a beef cattle enterprise in the uplands and hills. In lowland, more versatile areas, sheep are often part of a farm rotation with other livestock types and arable crops, each enterprise benefiting from the other – in terms of improved efficiency and sharing of resources.

Integrated Farm Management (IFM) is a whole farm system providing efficient and profitable production that is also environmentally responsible. It works by integrating modern farming techniques with the environment.

7. Minimise reliance on purchased inputs (fertilisers, pesticides, irrigation water, energy, chemicals)

Due to the temperate climate of the UK there is generally an abundant supply of rainfall and irrigation is not required for sheep production.

Nitrate Vulnerable Zones (NVZ) occupy 70% of England, 3% of Wales, 14% of Scotland and 100% of Northern Ireland. Farmers within an NVZ have restrictions related to manure storage and spreading, timing of application and use of artificial fertiliser, and the amount of nitrogen that can be applied per hectare of land farmed. This is generally not a problem for sheep enterprises since stocking rates are not high and stored manure is minimal.

Management tools such as **Manure Nitrogen Evaluation Routine (MANNER)** and **Planning Land Applications of Nutrients for Efficiency and the environment (PLANET)** based on fertiliser recommendations for agricultural and horticultural crops (RB209) are available to farmers to help them comply with these regulations, to make best use of livestock manures and minimise the use of artificial fertiliser.

Pesticides and herbicides are used infrequently on pasture land for sheep and would generally be confined to the control of invasive weeds like nettles, thistles and docks.

8. Develop biological systems which do not need high levels of material inputs

UK sheep farms have stocking rates that suit the natural environment, from less than 1 ewe per hectare in remote and wild landscapes of Scotland and Wales to 14 or more ewes/hectare in lowland fertile areas of the country.

Supplementary feeding and winter housing are only used to protect sheep welfare and productivity with over 95% of the sheep's diet derived from natural grazed grass.

The UK has seen an increase in the number of farms converting to organic production over the last 10 years. Agricultural land certified as organic amounts to 4.3% of total agricultural area in the UK. Given the extensive nature of sheep production in the UK, it lends itself to organic production. Organic farming is more common in the traditional sheep keeping areas of the UK. Each organic producer is regulated by a certification body and is inspected annually to ensure compliance with organic standards.

9. Wool marketing

Sheep farms in the UK are predominantly family run businesses and are an important part of rural communities, often employing local people for part time work during busy periods such as shearing and lambing. The average flock size is about 200 breeding ewes ranging from 5 to 5000. Sheep farming is a long standing tradition in many regions of the UK spanning many generations of the same farming families.

The British Wool Marketing Board (BWMB) is a farmer run organisation which operates a central marketing system for UK fleece wool, with the aim of achieving the best possible net returns for farmers. The BWMB is the only organisation in the world that collects, grades, sells and promotes fleece wool and is the only remaining agricultural commodity board in the UK.

The Wool Marketing Scheme under the Government Act of 1950 requires that the BWMB:

- handles every clip each year irrespective of size, quality or geographical location
- returns the market price

The BWMB co-ordinates the collection and sale of wool from approximately 60,000 registered producers throughout the UK. They collect, grade and sell the wool throughout the year at public auction. All wool is tested pre-sale to international standards. Over 60% of the British wool clip is exported unprocessed or semi-processed to over 50 countries all over the world. The main markets are in Belgium/Luxembourg, China, Denmark, Germany, Italy, Ireland and Japan.

The BWMB receives no financial support, is a non-profit making organisation, returning the market price for wool, less its own costs to producers.

10. Provide healthy and humane care of livestock

The health and welfare of the UK sheep flock is vital to the sustainability of the sheep industry. A number of regulations exist to ensure that high standards are maintained.

On some farms lambs are tail docked and/or castrated. This is only done when deemed necessary for the longer term health and welfare of the sheep, associated with the management of entire males and reducing the risks of ectoparasites. There are regulations in place related to castration and tail docking which farmers must follow.

National systems of disease control are implemented in emergencies. The recent outbreak of Bluetongue (BTV8) in Europe initiated a national disease control strategy with the majority of UK sheep farmers vaccinating their sheep against this disease.

'Animal Health' is the government's executive agency primarily responsible for ensuring that farmed animals in England, Scotland and Wales are healthy, disease-free and well looked after.

The majority of farmers in the UK are now members of an assurance scheme. These schemes help to strengthen consumer confidence that livestock products have been produced to good standards of health, husbandry and welfare.

The Farm Animal Welfare Council (FAWC) is an independent advisory body established by the Government in 1979. Its terms of reference are to keep under review the welfare of farm animals on agricultural land, at market, in transit and at the place of slaughter; and to advise the Government of any legislative or other changes that may be necessary. FAWC produces in-depth reports on particular animal welfare issues.

References

1. Protection and enhancement of environmental quality and natural resource

For further information on the agri-environment schemes available in England, Wales, Scotland and Northern Ireland visit:

- wales.gov.uk/topics/environmentcountryside/farmingandcountryside/farming/agrienviroementschemes/?lang=en
- www.naturalengland.gov.uk/ourwork/farming/funding/es/default.aspx
- www.scotland.gov.uk/Topics/farmingrural/Agriculture/Environment/Agrienvironment
- www.ruralni.gov.uk/environment/countryside/schemes

The UK Codes of Practice for the Protection of Soil, Water and Air:

www.defra.gov.uk/foodfarm/landmanage/cogap/documents/cogap090202.pdf

Statutory Management Requirements (SMR's):

www.crosscompliance.org.uk/cms/assets/Uploads/PDFs/SMRs-08.pdf

Good Agricultural and Environmental Conditions (GAEC's):

www.crosscompliance.org.uk/cms/assets/Uploads/PDFs/TheGuidetoCrossComplianceinEngland.pdf

The Environment Agency:

www.environment-agency.gov.uk/

The Rural Payments Agency:

www.rpa.gov.uk/

The Veterinary Medicines Directorate:

www.vmd.gov.uk/

Environmental Impact Assessment (Agriculture) (England) Regulations 2006

www.opsi.gov.uk/si/si2006/20062522.htm

2. Transport of animals

The EU Welfare in Transport Regulation 2007:

www.defra.gov.uk/foodfarm/farmanimal/welfare/transport/euguidance/training

3. Use of veterinary medicines

Responsible Use of Medicines in Agriculture

www.ruma.org.uk/sheep.htm

Sustainable Control of Parasites in Sheep (SCOPS)

www.sheepvetsoc.org.uk/scops.htm

Veterinary Medicines Regulations Act 2006
www.opsi.gov.uk/SI/si2006/20062407.htm

Sheep dip disposal regulations
www.environment-agency.gov.uk/netregs/businesses/agriculture/93470.aspx

The Veterinary Medicines Regulations 2008
www.opsi.gov.uk/si/si2008/uksi_20082297_en_1

The Animals and Animal Products (Examination for Residues and Maximum Residue Limits) (Amendment) Regulations 2001
www.opsi.gov.uk/SI/si2001/20013590.htm

4. Reduce release of Greenhouse Gases

English Beef and Lamb Executive (Eblex)
www.eblex.org.uk/

Meat Promotions Wales/Hybu Cig Cymru
www.hccmpw.org.uk/

Quality Meat Scotland
www.qmscotland.co.uk/

Livestock and Meat Commission
www.lmcsi.com/

5. Reduce reliance on non-renewable resources and increase the use of renewable resources and energy

6. Diversify crops and cultural practices to enhance the biological and economic stability of the farm

Integrated Farm Management
www.leafuk.org/leafuk/organisation/ifm.asp

7. Minimise reliance on purchased inputs

Nitrate Vulnerable Zones (NVZ's)
www.defra.gov.uk/environment/quality/water/waterquality/diffuse/nitrate/nvz2008

Manure Nitrogen Evaluation Routine (MANNER)
www.adas.co.uk/MANNER/tabid/270/Default.aspx

Planning Land Applications of Nutrients for Efficiency and the environment (PLANET) www.planet4farmers.co.uk

RB209 - Fertiliser recommendations for agricultural and horticultural crops
www.defra.gov.uk/foodfarm/landmanage/land-soil/nutrient/fert/rb209/index

8. Develop biological systems which do not need high levels of material inputs

Statistics on Organic production can be found at
statistics.defra.gov.uk/esg/statnot/organics%20uk.pdf

9. Wool marketing

The homepage of the British Wool Marketing Board can be found at
www.britishwool.org.uk/index_main.asp?pageid=16

Details on the work of the BWMB and the end uses of wool can be found at
www.britishwool.org.uk/pdf/corp_brochure_2009.pdf

10. Provide healthy and humane care of livestock

The Welfare of Livestock (Prohibited Operations) (Amendment) 1987
www.opsi.gov.uk/si/si1987/uksi_19870114_en_1.htm

Protection of Animals (Anaesthetics) Act 1954
www.animallaw.info/nonus/statutes/stukuk1954c46.htm

Welfare of Animals (Transport) (2006)
www.opsi.gov.uk/SI/si2006/20063260.htm

The Code of Recommendations for the Welfare of Livestock – Sheep
www.defra.gov.uk/foodfarm/farmanimal/welfare/onfarm/documents/sheep.pdf

Welfare of Farmed Animals Regulation 2007
www.opsi.gov.uk/si/si2007/uksi_20072078_en_1

Animal Health
www.defra.gov.uk/animalhealth/

Farm Assurance schemes
www.qmscotland.co.uk
www.abm.org.uk
www.fawl.co.uk
www.lmcni.com

Farm Animal Welfare Council (FAWC) www.fawc.co.uk