



Hereford Cattle Breeding Programme

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Breed Details

Name

The Hereford Cattle Society

Breed Standard

Traits: The Hereford breed is renowned for its ease of calving, good temperament, forage ability (producing beef off a grass-based diet) and good quality marbled beef.

Characteristics:

- **Head and Neck:** Forehead broad, face in proportion with look of alertness, muzzle broad, neck of good length, throat clean and not too full, jaw must be well set neither over or under shot. Teeth to meet the pad correctly. Top of the head should be higher than the crest or neck and the back.
- **Forequarters:** Shoulders should be smooth and well covered with flesh, should not be too prominent for the sake of ease of calving, brisket neat and trim with no waste, legs should be straight, even and set well apart.
- **Body:** Back should be long and broad with a level topline, ribs should be well sprung, loins should be wide and deep for good expression of eye muscle, firm to touch, flank, brisket and belly should carry no waste.
- **Colour:** Face, crest, underside, socks and brush to tail should be white, the body should be a deep rich red.
- **Legs and locomotion:** Legs should be set squarely, feet should be even and straight, walking action should be free and smooth, not rolling hips, twisting or crossing legs and straddling.
- **Hindquarters:** Rump should have good width and be well muscled, tail head should be set flush with the topline, thighs should be wide and well-muscled, legs should be set wide apart without being either too crooked or straight, testicles should be of adequate and even size.
- **General:** Overall appearance of alertness combined with docility, should parade well and appear healthy; smooth frame and fleshing free from coarseness, coat fine and silky.

Aims of the Breeding Programme

Introduction

The Hereford is a versatile breed, for use in the dairy herd, as a terminal sire or suckler cow. The Hereford is recognised across the world as an efficient, hardy and productive animal, which produces superior beef.

Herefords are the sire of choice for many dairy farmers, having been tried and tested for generations providing good fertility, ease of calving and longevity.

The breed is equally well-suited to any commercial suckler herd as either a terminal sire, or suckler cow. Continental suckler herds are increasingly turning to the Hereford to save management time and provide less reliance on additional feed.



Breeding Programme Aims and Procedures

The aim of this breeding programme is the improvement of the breed.

To promote and register all pedigree Hereford cattle born in the United Kingdom and ensure the integrity of the breed is upheld.

Improving the breed involves a multifaceted approach that encompasses several areas, and the society's guidelines outline various measures contributing to this goal:

- **DNA Testing:** Mandating DNA testing before registration for specific defects ensures the identification and exclusion of genetic abnormalities like hypotrichosis, diluter, idiopathic epilepsy, maple syrup urine disease, and mandibulofacial dysostosis.
- **Parentage Verification:** Requiring parentage verification ensures accurate lineage, maintaining genetic purity within the breed.
- **Embryo Transfer Guidelines:** Strict guidelines for embryo transfer involve DNA profiling, donor and sire verification, ensuring that resulting calves are accurately documented and genetically healthy.
- **Pedigree Accuracy:** Maintaining accurate and comprehensive pedigree records enables breeders to make informed decisions in selecting mating pairs
- **Registration and Tagging:** Registration requirements and tagging procedures ensure traceability and accurate records, facilitating informed breeding decisions.
- **AI and Semen Import/Export Standards:** Strict regulations for artificial insemination, import, and export of semen ensure that only genetically healthy specimens are used for breeding, contributing to the breed's improvement. This includes DNA testing of bulls used for AI, designation in herd books and pedigrees, and the registration process for progeny resulting from AI or embryo transfer.
- **Herd Inspection and Compliance:** Herd inspections and compliance with zootechnical legislation maintain the overall health and integrity of the breed. This includes random calf inspections and
- **Random Inspections:** Random calf inspections, DNA testing, and dam verification enhance monitoring and adherence to breeding standards. The council has the right to request inspections of herds or animals at any time.
- **Council Oversight:** The society's council retains the right to refuse registration, terminate entries, or investigate any cases of suspected irregularities, ensuring adherence to regulations.
- **Research Support:** Encouraging research projects and development initiatives approved by the council allows for the advancement of breeding techniques and genetic improvement



Through these outlined measures, the society aims to maintain and enhance the breed's genetic health, purity, and adherence to breed standards. By promoting responsible breeding practices, maintaining accurate records, and enforcing stringent regulations, they create a framework that supports continuous improvement within the Hereford breed.

Facilities and Equipment

The dedicated Hereford Cattle Society office is equipped with plenty of desk space and storage facilities along with a computer suite using Breedplan - a computer system that records all ancestry, performance and pedigree status.

Checking and Recording Pedigree Information

The Hereford Cattle Society uses the International Beef Recording Scheme – Breedplan, a system operated by AGBU (Animal and Genetics Breeding Unit) to record pedigree information.

Breedplan is a modern genetic evaluation system for beef cattle. Using Best Linear Unbiased Prediction (BLUP) technology, Breedplan produces Estimated Breeding Values (EBVs) for cattle for a range of important production traits including calving ease, fertility, growth and carcass traits.

The Hereford Cattle Society also uses a unique tag number followed by a unique six-digit number. This number will also be on the animal's ear tags. Each pedigree animal will also be identified on our system with a name i.e. their prefix followed by a unique name.

All bulls used for pedigree breeding must be DNA profiled and genetically tested.

All AI bulls are DNA tested.

All bulls and females entered in officially recognised society sales must be DNA profiled and genetically tested.

In the case of embryo transplant, all donor females must be DNA genotyped and all calves must be DNA tested for parent verification.

All first-time calvers are genotyped (where possible) and sire verified (if the sire has been previously SNP tested).

Random DNA checking is carried out on general calf registrations.

Geographical Territory

United Kingdom

Number of Breeding Animals

As at 2022;

England 5629 (70.3% of the total population)

Scotland 419 (5.5% of the total population)

Wales 1137 (15.9% of the total population)

N Ireland 733 (8.3% of the total population)



2022: number of pedigree dams which produced offspring: 8,626

2022: number of pedigree sires which produced offspring: 1,178

2022: number of pedigree female registrations: 4,971

2022: number of pedigree male registrations: 2, 986

Data Collection / Performance Testing / Genetic Evaluation

Breeding and Performance Evaluation

The Hereford Cattle Society encourages its members to performance record through educating them of its benefits. The Society also offers Breedplan services free of cost to members; a financial incentive to those using a scanning technician to record carcass traits and a financial payment to those purchasing Hereford bulls that qualify as Superior Carcass Sires (a criteria set by trustees of the Society).

Genetic Evaluation

Since July 2018, The Hereford Cattle Society moved from Microsatellite to Single-Nucleotide Polymorphisms (SNPs) DNA testing. As the Society increases the number of DNA SNP profiles analysed and gathers more phenotypical data, it has the future option of producing single-step genomically enhanced Estimated Breeding Values.

Number of Breeders

Across the UK we have approximately 1,476 members of the Hereford Cattle Society, and a further 1 member not resident in the UK.

Identification

The Hereford Cattle Society uses a unique tag number followed by a unique six-digit number. This number will also be on the animal's ear tags.

Each pedigree animal will also be identified on our system with a name i.e. their prefix followed by a unique name.

Breeding Book Sections and Condition of Entry

Main Section

The Hereford Cattle Society operates a number of different classes within the main section. In all cases, the parents and grandparents must be recorded in the main section to enable entry of progeny. Imported animals or progeny of imported germinal products must be accompanied by a Zootech certificate issued by an approved 3rd country listed breed society or semen/embryo storage centre.

All horned cattle are recorded in the herdbook through their prefix and unique name.

All registered polled cattle are recorded through their prefix followed by a 1 and then their unique name.



British polled cattle are recorded through their prefix followed by a 3 and then their unique name.

Traditional Herefords (no imported bloodlines) are all horned cattle, so they are recorded by their prefix and unique name, but they also have [*] asterix after their name.

Entry Requirements - Main Section

New registrations must have parents, and both sets of grandparents in the main section.

Imported animals and progeny of imported germinal products must be accompanied by a Zootechnical certificate issued by an approved 3rd country listed breed society or approved collection/storage centre.

Supplementary/Appendix Section

The Hereford Cattle Society does not operate a supplementary register or allow grading up.

Technical Activities

The Hereford Cattle Society uses the International Beef Recording Scheme – Breedplan, a system operated by AGBU (Animal and Genetics Breeding Unit) based in Australia.

Email: barbara@breedplan.co.uk, +44 1738 622 478)

The Hereford Cattle Society also utilises the services of Weatherbys Scientific based in the Republic of Ireland. Weatherbys Scientific undertake all of the Society's DNA testing.

Email: mail@weatherbysscientific.com, +353 (0)45 875521

Zootechnical Certificates

All exported animals or germinal products will be accompanied by a Zootechnical certificate.

Zootechnical certificates can be requested for a fee as agreed by the Council.

Identity / Pedigree Checks

All bulls used for pedigree breeding must be DNA profiled and genetically tested.

All AI bulls are DNA tested.

All bulls and females entered in officially recognised society sales must be DNA profiled and genetically tested.

In the case of embryo transplant, all donor females must be DNA genotyped and all calves must be DNA tested for parent verification.

All first-time calvers are genotyped (where possible) and sire verified (if the sire has been previously SNP tested).

Random DNA checking is carried out on general calf registrations.

Reproduction Techniques

No limitation on techniques.