= Highland cattle =

Highland cattle (Scottish Gaelic : Bò Ghàidhealach ; Scots : Heilan coo) are a Scottish cattle breed . They have long horns and long wavy coats that are coloured black , brindle , red , yellow , white , silver (looks white but with a black nose) or dun , and they are raised primarily for their meat . They originated in the Highlands and Western Isles of Scotland and were first mentioned in the 6th century AD . The first herd book described two distinct types of Highland cattle but , due to crossbreeding between the two , only one type now exists and is registered . They have since been exported worldwide .

They are a hardy breed due to their native environment, the Highlands of Scotland. This results in long hair, giving the breed its ability to overwinter. Bulls can weigh up to 800 kilograms (1 @,@ 800 pounds) and cows up to 500 kilograms (1 @,@ 100 pounds). Their milk generally has a very high butterfat content, and their meat, regarded as of the highest quality, is gaining mainstream acceptance as it is lower in cholesterol than other varieties of beef.

= = Breed characteristics = =

They have an unusual double coat of hair . On the outside is the oily outer hair - the longest of any cattle breed - covering a downy undercoat . This makes them well suited to conditions in the Highlands , which have a high annual rainfall and sometimes very strong winds . Their skill in foraging for food allows them to survive in steep mountain areas where they both graze and eat plants that many other cattle avoid . They can dig through the snow with their horns to find buried plants .

Mature bulls can weigh up to 800 kilograms (1 @,@ 800 pounds) and cows can weigh up to 500 kilograms (1 @,@ 100 pounds) . Cows typically have a height of 90 ? 106 centimeters (3 ? 3 @.@ 5 ft) , and bulls are typically in the range of 106 ? 120 centimeters (3 @.@ 5 ? 4 ft) . Mating occurs throughout the year with a gestation period of approximately 277 ? 290 days . Most commonly a single calf is born , but twins are not unknown . Sexual maturity is reached at about eighteen months . Highland cattle also have a longer expected lifespan than most other breeds of cattle , up to 20 years .

The coat colors are caused by alleles at the MC1R gene (E locus) and the PMEL or SILV gene (D locus) .

They have a docile temperament and the milk has a high butterfat content, so have traditionally been used as house cows. They are generally good @-@ natured animals but very protective of their young.

= = = Cold tolerance = = =

All European cattle cope relatively well with low temperatures but Highland cattle have been described as " ... almost as cold @-@ tolerant as the arctic @-@ dwelling caribou and reindeer ... " Conversely they are much less tolerant of heat than zebu cattle, which originated in South Asia and are adapted for hot climates. Highland cattle have been successfully established in countries where winters are substantially colder than Scotland such as Norway and Canada.

= = = Social behaviour = = =

A fold of semi @-@ wild Highland cattle was studied, over a period of 4 years. It was found that the cattle have a clear structure and hierarchy of dominance, which reduced aggression. Social standing depended on age and sex, with older cattle being dominant to calves and younger ones and males dominant to females. Young bulls would dominate adult cows when they reached around 2 years of age. Calves from the top ranking cow were given higher social status, despite minimal intervention from their mother. Playfighting, licking and mounting were seen as friendly contact. Breeding occurred in May and June, with heifers first giving birth at 2? 3 years old.

= = = Development = = =

The breed was developed in the Highlands and Western Isles of Scotland from two types of now @-@ extinct cattle, one originally black, and the other reddish. The original cattle were brought to Britain by Neolithic farmers. Highland cattle have a history that dates back to at least the 6th century AD, with the first written evidence dating back to the 12th century AD.

The 1885 herd book describes two distinct types of Highland cattle . One was the West Highland , or Kyloe , originating from the islands , which had harsher conditions . These cattle tended to be smaller , to have black coats and , due to their more rugged environment , to have long hair . The other type was the mainland ; these tended to be larger because their pastures provided richer nutrients . They came in a range of colours , most frequently dun or red . These types have now been crossbred so that there is no distinct difference .

Since the early 20th century, breeding stock has been exported to many parts of the world, especially Australia and North America.

It is estimated that there are now around 15 @,@ 000 Highland cattle in the United Kingdom.

= = = Scotland = = =

Originally , small farmers kept Highlands as house cows to produce milk and for meat . The Highland cattle registry (" herd book ") was established in 1885 . This is the oldest herd book in the world , which makes them the oldest registered cattle in the world . Although a group of cattle is generally called a herd , a group of Highland cattle is known as a " fold " . This is because in winter , the cattle were kept in open shelters made of stone called folds to protect them from the weather at night . They were also known as kyloes in Scots .

In 1954, Queen Elizabeth ordered Highland cattle to be kept at Balmoral Castle where they are still kept today.

= = = Australia = = =

Highland cattle were first imported into Australia by the mid @-@ 19th century by Scottish migrants such as Chieftain Areneas Ronaldson MacDonell of Glengarry , Scotland . Arriving in Port Albert , Victoria , in 1841 with his clan , they apparently drove their Highland cattle to a farm at Greenmount , on the Tarra River , preceded by a piper . Samuel Amess , also from Scotland , who made a fortune in the Victorian goldfields and became Mayor of Melbourne in 1869 , kept a small fold of black Highland cattle on Churchill Island . They were seen and survived in Port Victoria during the late 1800s , but other folds were believed to have died out in areas such as New South Wales . In 1988 the Australian Highland Cattle Society was formed . Since then , numbers have been growing and semen is being exported to New Zealand to establish the breed there .

= = = Canada = = =

Highland cattle were first imported into Canada in the 1880s. Both the Honourable Donald A. Smith , Lord Strathcona of Winnipeg , Manitoba , and Robert Campbell of Strathclair , Manitoba , imported one bull each . There were also Highland cattle in Nova Scotia , Canada , in the 1880s . However , their numbers were small until the 1920s when large @-@ scale breeding and importing began . In the 1950s cattle were imported and exported from North America . The Canadian Highland Cattle Society was officially registered in 1964 and currently registers all purebred cattle in Canada . Towards the end of the 1990s , there was a large semen and embryo trade between the UK and Canada . However , that has stopped , largely due to the BSE (mad cow disease) outbreaks in the

United Kingdom . Today , Highland cattle are mainly found in eastern Canada . The population of Highland cattle for Canada and the United States of America combined is estimated at 11 @,@ 000

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= = Modern farming = =

The meat of Highland cattle tends to be leaner than most beef because Highlands are largely insulated by their thick, shaggy hair rather than by subcutaneous fat. Highland cattle can produce beef at a reasonable profit from land that would otherwise normally be unsuitable for agriculture. The most profitable way to produce Highland beef is on poor pasture in their native land, the Highlands of Scotland. The meat is also gaining popularity in North America as the beef is low in cholesterol.

= = = Commercial success = = =

The beef from Highland cattle is very tender , but the market for high @-@ quality meat has declined . To address this decline , it is common practice to breed Highland " suckler " cows with a more favourable breed such as a Shorthorn or Limousin bull . This allows the Highland cattle to produce a crossbred beef calf that has the tender beef of its mother on a carcass shape of more commercial value at slaughter . These crossbred beef suckler cows inherit the hardiness , thrift and mothering capabilities of their Highland dams and the improved carcass configuration of their sires . Such crossbred sucklers can be further crossbred with a modern beef bull such as a Limousin or Charolais to produce high quality beef .

= = Showing = =

For show purposes, Highland cattle are sometimes groomed with oils and conditioners to give their coats a fluffy appearance that is more apparent in calves; it leads some outside the industry to call them " fluffy cows ". Many also call the cows " hairy cows " due to their thick coats.

= = = Breed standard = = =

The breed standard is a set of guidelines which are used to ensure that the animals produced by a breeder or breeding facility conform to the specifics of the standardized breed . All registered Highland cattle must conform to it . The breed standard was created in Inverness on 10 June 1885 . There are four main parts to the standard : the head , the neck , the back and body , and the hair . Below is a concise list of the main points of the breed standard . A judge in a show will judge the cattle against a provided breed standard .

Head

Proportionate to body

Wide between eyes

Must naturally have horns, but may be trimmed in commercial rearing

Neck

Clear, without dewlap

Straight line to body

Back and Body

The back must be rounded

The quarters must be wider than the hips

The legs must be short and straight

Hair

The hair must be straight and waved

Sources: Highland Cattle Society, ScottishHighlandCattle.org