The ancestors of the Pinzgauer cattle were introduced to their primary breeding area in the Hohe Tauern mountain range located in today's federal state of Salzburg by the Celts around 800 BC. In the various valleys of Salzburg, Tyrol, Carinthia but also in Bavaria and Styria, different types of Pinzgauer cattle evolved: some spotted, predominantly brown, with some black variants. Most of the forerunners of our domestic animals had a protective color to blend in better with their environment. Baron Freiherr von Mesnil described the Pinzgauer cattle in 1857 as follows: "either completely brown or it may have a white line along the belly and back".

From time to time, however, there are also some black-colored animals. The different types are known by their various names: Pinzgauer, Pongauer, Salzburger Schecken, Mölltaler, Brixentaler, Tiroler Rückenschecken, Traunsteiner, or Berchtesgadner. The "Pinzgauer breed" was first defined in more precise terms after the creation of the first breeders' association at the end of the 19th century. The breeding targets were based on strict color requirements.

The black and white variant, known as the "lucky cow", survived as an individual animal that every farmer took pride in having. Breeder associations, however, preferred chestnut-colored animals - as a result, the black Pinzgauer cow has now become very rare. Another specialty is the genetically hornless Pinzgauer breed, known as "Jochberger Hummeln". This genetic variant also has a long tradition. The first record of a hornless calf dates back to 1834 - on the "Hallerwirt" estate in Aurach in the federal state of Tyrol. But in those days, hornless cattle were considered disfigured, because it was impossible to attach a yoke and use them as farm animals. Animals with beautiful horns were much in demand.

As early as 1820, Pinzgauers were exported to the regions that now constitute Romania, Yugoslavia as well as the Czech and Slovak Republics. At the time of the Austro-Hungarian Empire, Pinzgauers were the most common breed of cattle. In 1856, a collection of Pinzgauers was shown at the world exposition in Paris. The status of Pinzgauer cattle breeding was further enhanced at the world exposition in Vienna in 1873. Particularly popular were three-year-old Pinzgauer draught oxen that had been trained on collars and frontal yokes. In addition to dairy and meat production, getting the most out of the draught animals was one of the declared breeding targets. In 1893, a pair of Pinzgauer oxen in Munich pulled a load five times their combined body weight over a distance of one kilometer in 8.5 minutes. Pinzgauer oxen were also sought after in France, where they were also prized for their particularly succulent meat.
Pinzgauer cattle were selectively bred throughout the following decades, with special emphasis on the animal's fertility, robustness, and health. During World War II, Pinzgauer breeders lost their independence and all breeding activities were severely restricted. In 1950, Pinzgauer breeders formed an association. The objective was, again, to breed healthy, resilient, robust, fertile, and long-lived cattle that would be fast growing, easy to feed, adaptable, and with great fleshing ability and good milk and work output.

With the increasing use of technology, the breeding target of "work output" fell by the wayside, and more attention was given to milk and meat output. Changes to laws on animal breeding between 1965 and 1971 eliminated existing breed restrictions, and the relatively tight primary breeding area of the Pinzgauer cattle was soon weakened by a shift to other cattle breeds. The increasing specialization of agriculture led to an ever-growing demand for higher milk output. In 1969, therefore, a decision was made to include Red Friesian blood in order to improve milk output, udder shape, and milkability. Crossbred animals continue to be very popular on the dairy farms located in the Alpine foothills. However, some breeders in the mountains were quite doubtful of this concept and insisted on pure breeding. Dr. Josef Lederer, director of animal breeding, is the author of the current breeding program, which is again based on the idea of pure breeding. There are still considerable Pinzgauer populations to be found overseas, which, except for the Slovak Republic, Romania and Slovenia, are used exclusively for meat production. The Pinzgauer cattle in the Austrian primary breeding area are currently promoted as a high-output, dual-purpose breed. Its broad-based genetic diversity makes it an ideal variety for both dairy and meat production.

**Pinzgauer Cattle**

A Breed of Domestic Animal Indigenous to Austria

Originally, the Pinzgauer cattle were part of the European high-altitude livestock breeds and are dual-purpose animals bred specifically for dairy and meat production. This robust, medium-frame and efficient variety evolved from the red-spotted Bavarian cattle and the strong-boned, single-colored Slavic cattle.

**Origin**

The Pinzgauer with its chestnut base color and its typical white streak on the back, the flanks and the belly as well as on the thighs and calves derives its name from "Pinzgau", a district located in the federal state of Salzburg.
This typical color is a dominant hereditary feature and still characteristic of the Pinzgauer breed. Special rarities are the black-white types and the genetically hornless variant, also known as "Jochberger Hummeln". The beginnings of selection with respect to particular breed characteristics probably date back to the end of the 18th century. One considerable success of that breeding period was the presentation of these animals at the world fair in Paris in 1871. The Pinzgauer breed is the only breed indigenous (autochthonous) to Austria that has gained fame the world over.

**Occurrence**

As early as 1820, the first animals of this breed were exported to what is now Romania, Yugoslavia as well as the Czech and Slovak Republics, where, to this day, existing breeding areas are being developed further. Currently, there are about one million of these animals in 25 different countries (including 8 European countries) on four continents. Historically, the breeding areas in Austria, Bavaria, and South Tyrol (Alto-Adige) all belonged to the "primary breeding area". About 90% of the world's stock is found outside of Austria.

**Characteristics**

The regions where Pinzgauer cattle originated are characterized by small farms and difficult production conditions. Before the advent of machinery and the development of these mountainous regions, farmers needed hardy and resilient cattle that could travel great distances. These extensive forms of livestock farming in the alpine and mountainous regions of the primary breeding area resulted in a natural selection of animals that were highly adaptable to the harsh surroundings. Pinzgauer cattle, which had been exported to South Africa at the turn of the century and, later, to the US, Canada and Australia, were shown to withstand even the harshest environmental conditions, which is true of both purebred and crossbred animals. Their sturdy hooves and good leg build account for their excellent ability to travel across long distances and difficult terrain.

The animal's russet coat protects from ultraviolet rays, which are quite strong in the mountains and tropics as well as in expansive snowfields. Outside the primary breeding area, Pinzgauer cattle are used almost exclusively to suckle and as beef cattle. Scientific studies carried out by Prof. Franz Pirchner at the Technical University of Munich attest to the superior quality of Pinzgauer beef - on the basis of both subjective and objective quality criteria. Its marbling, succulence, flavor, and negligible grill losses as well as its fine-fibred quality are among the strong points of Pinzgauer beef. The Pinzgauer cattle, due to their high basic-feed consumption efficiency, are particularly useful in grassland areas; they are also considered ideal "organic cattle" because of their willingness to work, resilience, and longevity.

**Today's Breeding Target in the Primary Breeding Area of Austria**

The focus is on breeding an efficient, medium to large-frame dual-purpose Pinzgauer. As for milk yields, adult cows, from their third lactation onward and provided there is ample supply of nutrients, are expected to achieve an average lactation yield of 6,000 kilograms of milk, with 4% fat and 3.5% protein. Beef performance is the second most important breeding target. With respect to fattened bulls, subject to good muscling, the plan is to achieve a daily gain of 1,300 grams with an approximate slaughter yield of 58%. The current excellent meat quality is to be maintained. For the purposes of improving efficiency even further, greater attention will have to be paid to the increased intake of own feed, regular fertility, fast growth, and adaptability. As for selection, special care must be taken to ensure correct, firm limbs with sturdy hooves as well as well-shaped teats with a firm udder suspension that are easy to milk.

**Pinzgauer Cattle Outside the Primary Breeding Area**

On a global scale, Pinzgauer cattle may be classified as beef cattle. Outside of Europe, and for decades, they have been selected for their meat since they were first exported. A good milk yield ensures high gains of weight in calves. Successful showings at international exhibitions attest to the competitiveness of Pinzgauer cattle
among other beef cattle. At the Royal Easter Show in Sydney, a group of Pinzgauer cattle was awarded first prize - out of 18 different varieties of beef cattle. Breeders all over the world appreciate the meat volume of the purebred Pinzgauer cattle, their resilience, fertility, well-developed mother instinct as well as their peacefulness and longevity. The genetically hornless "Haller line" is particularly popular. The distinct and unique coat of the Pinzgauer cattle, with their pigmented eyes, provides perfect protection against UV radiation in extreme climates. Breeders pay special attention to absolute purity of breeding. Animals with foreign blood are rejected, except for crossbred utility livestock.

Summary

By way of conclusion, it can be said that the positive characteristics of Pinzgauer cattle become particularly manifest in the keeping of mother cows. The ideal ratio between milk, meat and, especially, certain secondary performance markers, such as the ability to travel across difficult terrain and great distances, an excellent mother instinct and hardiness, is conducive to the spread of this breed; in particular, in areas of more extensive farming with harsh conditions. Its broad-based genetic diversity allows the breed to be harnessed for multiple purposes for both pure breeding and crossbreeding of utility livestock. Breeders from around the world appreciate the large number of positive performance characteristics of this breed, and some even claim Pinzgauer cattle are the "most beautiful cattle in the world".

Carcass- and Meat Quality for the Pinzgauer Breed

in Comparison to other Dual Purpose Breeds

by Dr. Josef Kögel, Bavaria. Bavarian Institute for Animal Production in Grub, P.O. Box 1180, 85580 Poing

In a bull fattening trial involving 97 animals, the Bavarian dual-purpose breeds Pinzgauer and the middle-framed Original Braun-vieh and Murnau-Werdenfelser were tested for beef performance and meat quality and compared to Bavarian Simmental. The animals were intensively fattened with maize silage and concentrate until they were 500 days old. According to fat classes, large-framed Pinzgauer scored an average of 2.95 points and were thus slightly less adipose than the other breeds. Due to their excellent gross growth rate of 1180g from birth and their good dressing percentage (57.1 %), Pinzgauer nearly equaled Bavarian Simmental (706 g) in carcass weight (345 kg) and net daily gain (688g/day). Because the round showed less distinct muscling, Pinzgauer were, however, graded lower than other breeds by 0.4 to 0.6 EUROP classes. But half a EUROP class corresponds to merely half an Austrian schilling or to 175 schillings per carcass.

The Pinzgauer distinguished themselves even more with their excellent meat quality.

They rank first in all important characteristics of meat quality tested in the M. longissimus dorsi (9th- 11th rib). This muscle re-vealed a fat content of 2.51 % and thus 0.50 - 0.65 percent more than the other breeds. In a grading system ranging from 1 to 6 points (6 being excellent), Pinzgauer achieved the most distinct superiority in the parameters tenderness (0.8 to 1.3 points) and shear value (1.3 to 1.7 kg). Even Pinzgauer flavour and grill losses were significantly superior (P<1 %) to that of the other breeds. The higher number of points in juiciness was secured with P<5 %.

The fact that Pinzgauer beef featured the strongest redness, suggests good meat quality, since good redness signifies that other significant meat quality traits are positive as well.