Braunvieh: A Brief History And Description

History:

Braunvieh is quite possibly the oldest pure breed of cattle in the world. Fossils of cattle, similar to modern day Braunvieh, have been found in Switzerland dating back to over 800 BC. Contrary to popular belief, Braunvieh is not a crossbreed and is not a Brown Swiss.

The word Braunvieh is German for "Brown cow." The breed developed over thousands of years in the harsh environment of the Swiss Alps and the alpine valleys. These conditions led naturally to a sure footed, moderate sized, hearty animal that was easily adaptable, and able to thrive in a variety of environments on a variety of forages. A cow from one valley might be sold to a farmer in the next valley and would be expected to live and be productive on different types and amounts of forage.

The breed was improved during the Middle Ages with the oldest record on milk production being from 1050 AD. Over time Braunvieh cattle evolved, with each valley and region having it's own characteristics of this versatile breed. Constant was the pressure to raise surefooted, efficient, and adaptable animals that fulfilled the needs of the alpine residents.

As many families owned a small number of animals, they would often share a bull in a given area. In addition, many cattle lived in close proximity to their family on the small Swiss farms (think of the movie Heidi). Cows lived and worked alongside their humans, evolving to meet the changing needs of the population and reinforcing the functional traits the breed is known for today.

In this environment, cattle needed to be adaptable, efficient, hearty, docile, and easy to work with. Braunvieh needed to be all things to all people. These cows were a source of milk and meat, both for their families own consumption and to sell. All this had to be done on limited forage, often in difficult to access places.

During the 1800's the breed came together and agreed on the overarching characteristics of a Braunvieh cow. This is when the modern day Braunvieh really began to take shape. She needed to be brown, medium sized, with good feet and legs, well muscled, with good conformation. She needed to be dual purpose, producing a certain amount of milk relative to body weight.

During this time there was some division within the Braunvieh breed as some breeders focused on milk production while others focused on meat production, but Braunvieh were always expected to do both. Performance records were kept on milk and meat production allowing the breed to identify standards and standouts. These records gave producers a basis to identify and propagate high performance animals.

In the early 1900's, Swiss breeders became even more organized and set up strict criteria for a Braunvieh cow to be registered in the herdbook. These criteria

included; approval by 2 judges, and production of a minimum amount of milk during her first lactation. In addition, if a calf's dam did not meet these standards, the calf also could not be registered. Cows and bulls had to be performance tested and meet minimum standards, or they were removed from the herdbook. At any time, if a bull or cow failed to maintain these standards they were removed from the herdbook and not allowed to be used as breeding stock. Registration, therefore, was not only determined by birth, but also based on these standards. In this way only the best cattle could be registered in the herdbook and only the best cattle could be used for breeding stock. Additionally, up breeding was not allowed, in essence closing the herd book.

In 1869 seven pregnant Braunvieh heifers from Switzerland, and one bull, were introduced into the United States. Along with future importations, these animals ultimately became the basis for what is today Brown Swiss dairy cattle. Brown Swiss were developed over time and are considered distinct and separate from the Braunvieh breed. However, they both originated from the same breed in Switzerland, and are therefore related.

Braunvieh were exported to Mexico in the mid 1900's and are known as Ganado Suizo Europeo. They are very popular in the tropical and gulf regions of Mexico for the same reasons they are raised around the world: adaptability, efficiency, docility, functionality, and heartiness. Braunvieh flourish in the foothills and other areas where many other breeds struggle to survive. Their sure footedness makes them ideal for the rocky and uneven terrain present in many areas in Mexico. Even though they were developed in the mountains, Braunvieh are one of the few breeds of cattle that flourish in both cold and hot climates. Over the years some of the Mexican blood lines have made their way into the United States.

In 1969 the first Braunvieh bull Aaron was imported into Canada and, along with several females, became the basis for Starline Braunvieh. These cattle were selected in Switzerland for beef production. Braunvieh again proved their adaptability, functioning well in western Canada adjusting easily to the harsh winters and rangelands. In Canada, Braunvieh are registered with the Canadian Brown Swiss Association. Some animals are also registered with the Braunvieh Association of America allowing for animals and genetics to be exchanged over the years.

The Meat Animal Research Center (MARC) in Clay Center, NE began sampling Braunvieh in 1973-1974 for cycle II of the Germplasm Evaluation Program (GPE). Bulls used included Aaron (CA8719), Ueli (CA9342), Kasimer (BM4), and Grober (CA15). Braunvieh are currently part of the Gerplasm program ongoing today. The MARC has sold cows and semen over the years, also contributing to the genetic base of Braunvieh in the United States.

In the early 1980's Bell Rule Genetics imported animals directly from Canada and genetics from Canada, England, and Switzerland. In 1984 Braunvieh were imported directly into the United States from Switzerland. Harlan Doeschot of Golden Link

imported the yearling bulls Senat (SI5), Suro (SI21) and Sambo Jordi (IM1) along with the first cow Ledi (SI6). The next year 6 bulls and 4 heifers were imported including Riss Fabian (SI10), Forelle (SI54), and Erle (SI55) among others. In 1984 the Braunvieh Association of America (BAA) was founded to support a herd book as well as promote and supervise the breed in the US. The genetic basis for today's Braunvieh cow derives from these varied importations with significant exchange occurring between all of these sources over the years.

Description:

Braunvieh are categorized into two main groups: Fullblood and Purebred. Fullblood Braunvieh are 100% Swiss genetics and designated by the prefix OB (Original Braunvieh) in the herdbook. They are horned with traditional coloring. Purebred Braunvieh can be anywhere from 82% to 99% Braunvieh, may be horned, scurred, or polled and any color. Many purebred Braunvieh are traditional colored, but they can also be dunn, brindle and several lines are now homozygous black. The Braunvieh Association of America does not specify or track color for registered animals. Any animal DNA tested for color through the association will have this information available on the website.

The association also recognizes a "BeefBuilder" or percentage category comprising from 20% to 81% Braunvieh genetics, which are recorded in the database. Another designation recognized within the association is BraunX. These animals must be DNA verified homozygous polled and homozygous black and contain between 55% and 81% Braunvieh genetics with the remainder being majority angus from animals registered Angus. Animals that are over 82% Braunvieh who are homozygous black and homozygous polled are registered as Purebred. Finally, Braunvieh also recognizes a Mini classification within the BeefBuilder category. Animals designated as Mini cannot measure more than 43" at the hip.

Color: Traditional Braunvieh are a mousy brown to a grey brown with creamy to white ears and a distinct white muzzle. The ears are often large and set at right angles or slightly drooped with large hairs covering the front. This ear conformation helps them shed heavy snow to prevent frost bite or injury. Males are usually darker than females. Both males and females have a lighter to white underbelly and legs. This is not albinism but some lines are known to carry more white than others. Cows and bulls often have a white dorsal stripe, more visible in bulls. Calves of both sexes are grey white to almost a steel grey with some being more silver. All darken over time. The underlying skin is black, with the tongue, eyelids and nose being dark grey. The eyes are black with black skin around the eyes.

<u>Conformation:</u> Braunvieh have a larger dewlap at the neck than the navel and a medium neck. Chest should be broad and deep with a strong and level back. Front legs

should be straight with a 90 degree set. Back legs should be strong and well fleshed. They should have a good range of flexibility in their walk with a balanced gait and length of stride. Feet may be large but with correct angles and forward facing. Hooves are dark to black and hard. Females should appear feminine with a sound udder and medium muscle development. Males should appear masculine with more pronounced muscling and good development of reproductive organs.

Temperament: Braunvieh tend to be gentle, calm and easy to handle. The females are known for being attentive mothers with excellent maternal instinct.

A few notes: Braunvieh have black eyes and dark surrounding skin. They are generally considered to be less susceptible to pink eye and eye diseases than some other breeds, but not immune. The hooves are dark to black and hard. Along with correct angles in the feet and legs their hooves provide for incredible adaptability and surefootedness in difficult terrain. This is a trait that was naturally selected for over centuries in the mountains of Switzerland. They are also less prone to foot conditions such as foot rot. The ears are adapted to extreme cold and snowy conditions as stated above. With these traits in tow, Braunvieh are extremely adaptable to a variety of harsh, challenging and quickly changing conditions. They come by this naturally having evolved in the difficult, harsh and changing conditions of the alpine valleys.

Braunvieh today:

Today Braunvieh are raised in over 60 countries worldwide from the arctic circle to the tropics. They are found between sea level and 12,500 feet elevation. Braunvieh are present in all major countries with over 40 countries having associations and herdbooks helping to track and improve the breed. Countries with a notable large presence include Switzerland, Italy, South Africa, Mexico and India. This broad distribution represents many diverse environments and management systems, highlighting the breed's adaptability and functionality.

Braunvieh are generally considered a very maternal breed. They are attentive mothers that can produce enough milk to meet the demands of any calf if provided with adequate resources. It is not uncommon to see Braunvieh nursing one or two extra calves. Examples of orphan calves faring well without a mother abound as they are adopted by the herd and able to find plenty of milk. Braunvieh are docile, as stated above, and considered easy to work with. They are smart and alert but not overly wary. Braunvieh are fertile and possess good longevity with many cows active until 14+ years of age.

Braunvieh also bring efficiency and carcass improvement. Centuries of grazing in the Swiss Alps selected for cattle that could find forage, survive on limited resources and provide producers with plenty of meat on those limited resources.

In the United States, the breed is governed by the Braunvieh Association of America. This body oversees the herdbook and participates in several programs aimed at breed improvement including genetic evaluation (genomics), feed outs, a comprehensive sire evaluation program, national sale, as well as youth programs and shows. A Junior Braunvieh Association of America (JBAA) functions in parallel and is run by junior members with BAA oversight. The BAA is active in genetic improvement programs, participating in the IGS database and utilizing genomic data to enhance EPD's.

Braunvieh developed over centuries in the Swiss Alps and alpine valleys, often in small herds in close proximity to their family. Because of these environmental pressures they naturally evolved into a hearty, efficient, adaptable, sure footed, docile animal. The breed really came into its own during the late 1800's and early 1900's as the breed association in Switzerland became more organized, setting strict standards and guidelines for registration and breeding stock. Braunvieh spread throughout the world, eventually filtering into North America during the mid to late 1900's. The Braunvieh Association of America was started in 1984 maintaining the official herdbook for the breed in the United States. Today's Braunvieh cattle and their Association continue to produce highly functional and adaptable cattle for the beef industry at large.

Braunvieh: Moderate, Maternal, Carcass, Adaptable

Braunvieh have been available commercially in the United States for over 40 years. During that time, they have been evaluated and used in a variety of situations and systems around the country. This has afforded ample opportunity to assess how they might fit into a commercial program, and what a producer could reasonably expect to see by introducing them.

Versus a black baldie cow, based on summer of 2025 prices, Braunvieh cross cows can increase your bottom line by over \$73 at weaning per cow exposed (21 lbs higher weaning weight x \$350 CWT). They can increase profit \$4 per 100 lb hot carcass weight by improving yield grade by 1. By giving you one extra year of fertility producing 6 calves instead of 5, assuming \$3000 for a bred heifer and \$1500 salvage price, Braunvieh provide a \$50 profit. All this and some of the lowest input costs of any cross studied at the Meat Animal Research Center (MARC).

Braunvieh Profit Summary:

Profit at weaning per cow exposed	\$73
Profit per 1000 lb hot carcass weight	\$40
Extra year of fertility	\$50
Total profit	\$163

In this article we will explain how Braunvieh can accomplish these numbers. We will discuss some of the positive traits and characteristics Braunvieh can bring to your herd such as maternal excellence, carcass merits, and adaptability. We will also outline a few suggestions for introducing Braunvieh genetics and discuss some of the shortcomings to consider.

Whether you're trying to improve cow herd traits through crossbreeding, market more valuable calves, produce replacement females, or improve feedlot performance and grid marketing, Braunvieh is a proven breed that can help you achieve these goals.

Maternal:

Braunvieh were developed over centuries in the harsh extremes of the Swiss Alps. Unlike breeds developed for one specific area or climate, Braunvieh had to survive and thrive in quickly changing and treacherous areas with diverse forages. Natural selection dictated that cattle had to be adaptable to climate extremes, a variety of

forages, and a wide variety of terrains. Cows had to survive and produce calves in these harsh environments. Cattle that didn't adapt didn't survive. Over the centuries the cattle that were productive and did survive became the basis for Braunvieh cattle today.

Braunvieh are a very maternal breed. They are a moderate sized breed weighing between 1100 and 1400 pounds with ample milk, and high rates of fertility, all while passing on preferred carcass traits. As a moderate breed, Braunvieh and Braunvieh cross cattle can be harvested sooner at an acceptable quality grade before the carcass gets too big, avoiding those expensive later days on feed.

Fertility is an important trait for any beef herd's profitability. Braunvieh and Braunvieh cross cattle have been shown to have high rates of conception and fertility. At the MARC in Clay Center, NE, 93% of Braunvieh cross females were found to be pregnant at 550 days (table 1).

Braunvieh sired females also produce more marketable weight at weaning. At the MARC these females produced 5% more marketable weight, or 21 lbs, than a traditional Angus / Hereford (black baldie) cross at the time of weaning (Table 2). Based on summer 2025 prices, assuming \$3.50/lb, each Braunvieh sired cow delivered \$73 (21 x \$3.50) more per year at weaning than a black baldie. They do all this with a lower BCS and the lowest cow maintenance energy requirements of any cross studied at the MARC. This research suggests Braunvieh cross females produce more marketable weight at weaning with the lowest input costs of any cross studied, including black baldie.

Longevity is also an important quality for any commercial cow, avoiding expensive replacement costs. At JHL Ranch in Ashby, NE they run a 1500 cow commercial herd. Over a 7 year period, 47% of Braunvieh sired females were still in the herd compared to 28% of the Angus sired females. When you consider the longer a cow is in production the more profitable she is, this time is money.

Carcass:

Braunvieh rank very high among continental breeds for marbling. Data published from the MARC in Clay Center, NE on calves born in 2023 showed Braunvieh sired animals had the second highest marbling score of any continental breed, second only to Simmental. Among the 15 breeds tested, Braunvieh scored fourth overall behind Simmental, Red Angus, and Black Angus.

Importantly, despite their high level of marbling, Braunvieh sired calves had the third lowest back fat thickness; behind Maine and Charolais. The three breeds with the thickest back fat were Black Angus, Red Angus and Hereford. Although Black and Red Angus led the group in marbling, they also led the group in back fat, negatively impacting yield grade.

Braunvieh sired calves not only had high levels of marbling but kept back fat in check, improving yield grade. Despite being a moderate framed breed, Braunvieh also had an average ribeye area. Based on this information from MARC, English cow herds could theoretically improve their overall yield grade by one simply by switching to a Braunvieh bull without negatively impacting their quality grade. Based on summer 2025 prices, improving yield grade by one anywhere from 1 to 5 results in an average increase of \$4 per CWT for cattle sold on the grid. On a 1000 lb carcass, that's in increased profit of \$40 per cow with the same, or lower, inputs.

Adaptable:

Braunvieh are incredibly adaptable. A testament to Braunvieh adaptability is the fact that they are used around the world from hot, semi-arid climates to cold climates, from 12,500 feet to sea level. They adapt well to high altitudes, tropics and grasslands. They tend to tolerate whatever Mother Nature throws at them while remaining productive and functional.

Braunvieh evolved in the mountains where sure-footedness was necessary for survival and have retained that trait today. They are still popular in the Swiss Alps for this reason. In central Mexico they are used in the foothills and on rocky terrain where other breeds struggle. In eastern Kentucky producers have appreciated their ability to graze mountainous and rocky valleys that other breeds avoid. Their hard hooves and leg conformation allow them to navigate these difficult areas to find forage with fewer problems than most beef cattle.

Despite being developed in the mountains, Braunvieh are very heat tolerant. This is evidenced by their popularity in warmer climates such as central Mexico, India and South Africa. The brown color does not absorb heat, decreasing heat stress vs black cattle. Braunvieh have hair that is sleek and fine in warm weather allowing them to adapt to warmer climates better than many breeds. They can also grow a heavy coat in response to extended cold weather, making Braunvieh adaptable to these environments as well. During the recent droughts in Texas, Braunvieh have weathered the lack of forage as well or better than other breeds.

Tommy Stoddard raises cattle in southern Louisiana on some of the most inhospitable land you can raise cattle. Areas that "An Angus won't survive" according to him. He uses Braunvieh for their ability to not only survive but thrive in this harsh environment. He describes Braunvieh as docile and functional with better feet and fewer problems than other non *Bos Indicus* breeds. He states they have fewer problems with Pink Eye and Foot Rot than any other British or Continental breed in his area, and are only surpassed by the *Bos Indicus* cattle in his operation. He also crosses Braunvieh with Brahman to graze swampy areas that are often submerged. According to Tommy, this F1 cross can survive anywhere. He feels the Braunvieh make the Brahman more

docile and better mothers while contributing to the hardiness of the Brahman themselves. Additionally Braunvieh improve the carcass merits of the F1 cross.

From Mountains to rangeland, hot conditions to cold, drought to swamp, Braunvieh have proven their ability to adapt and produce in the harshest of conditions.

Minimal Problems:

Braunvieh are relatively problem free. Like other breeds with black skin around the eyes, Braunvieh have low rates of ocular cancer. They also have lower rates of pink eye. Centuries of breeding and natural selection in the Swiss Alps have provided the breed with good legs and feet. This allows them to survive and thrive even in the most challenging of conditions. This feature has persisted in modern Braunvieh and contributes to their longevity, adaptability, and overall health.

Braunvieh have hard black hooves. This helps prevent foot problems such as foot rot and cracked hooves. In the harsh environment of southern Louisiana, Braunvieh have fewer foot problems than other Continental or British breeds.

A few thoughts about pink eye. Over the years some have claimed that Braunvieh are immune from pink eye. This is not the case, but Braunvieh do seem to be less susceptible than other breeds. In Southern Louisiana, Braunvieh are much less susceptible to pink eye than Hereford or Angus but not as resistant as Brahman. A rancher running a mixed herd in Wyoming explained that when they would have a pink eye out break; if 50% to 75% of the Angus and black cows contracted it, only 5% to 10% of the Braunvieh would. Another example is in Wisconsin where three Braunvieh calves were born into a commercial Hereford recip herd containing 30 cow / calf pairs. The remainder of the calves were registered Hereford embryo calves or black baldies from the clean up bull. The herd experienced two outbreaks of pink eye in 3 months, during which 26 of 27 Hereford and black baldie calves contracted pink eye twice while the three Braunvieh calves were unaffected, never contracting pink eye. This is an extreme example but one that Braunvieh breeders hear frequently.

The next question is how often do crossbred and F1 Braunvieh cattle contract pink eye? The MARC does not keep accurate data on this disease in the different breeds studied. Anecdotally the rate of pink eye seems to be decreased compared to the rate in other *Bos Taurus* breeds alone. To this author's knowledge, there is no scientific research on the subject. To complicate the matter, many Braunvieh cross cattle are stocked with high percentage, purebred, or Fullblood Braunvieh that seem to have a lower incidence of pink eye. Therefore, whether the decreased rates of pink eye observed in F1 cattle are from genetic factors or an overall low burden within the herd, is unknown.

Challenges moving forward

Just like all breeds, Braunvieh are not perfect and are certainly not perfect for everyone in every situation. In this article we will focus on three challenges Braunvieh have within the commercial beef industry; birth weight, horns, and color.

Braunvieh are a continental breed that evolved over the centuries at high altitudes with limited oxygen and resources. Additionally, living so close to their family in a herd of one or two cows allowed any calving issues to be dealt with. However, when Braunvieh were brought down to lower altitudes with more oxygen and plentiful resources, they produced larger calves, occasionally much larger calves.

The first challenge is birth weight and calving ease. Many continental breeds struggled with large calves when introduced into the United States and had to work through the problem. Braunvieh was no exception. However, Braunvieh were introduced later and to less acceptance and fanfare, which led to fewer long term breeders to work on the problem. As a breed known for their bone and structure, improving birth weight in Braunvieh cattle often changes their aesthetic, discouraging many breeders from addressing the problem. That, combined with the "dairy look" of their coloring, kept the breed small, providing little incentive to improve birth weights overall. This left many Hobby breeders with no long term goal or incentive to improve calving ease and birth weight.

To compound matters, many early adopters of Braunvieh were more focused on frame and growth with little attention paid to birth weight. Some of the first bulls introduced to the United States had terrible calving ease and very high birth weights. This created a founder's effect with some of the first animals introduced into the United States passing on high birth weights and not much calving ease. This founder's effect also decreased the genetic pool of calving ease for breeders to draw from. These early factors hampered long term improvement.

The breed has made significant strides over the last two decades in bringing down overall birth weights and improving calving ease. The average EPD's for calving ease direct (CED) and calving ease maternal (CEM) have steadily increased, indicating fewer unassisted calvings, while the average birth weight (BW) EPD has steadily decreased during that time. Importantly, the average weaning weight (WW) and yearling weight (YW) have increased during that time. At the MARC in Clay Center, NE the average birth weight of Braunvieh sired calves in 2023 was 87.6 lbs. This put them in the middle ½ of breeds sampled with the same birth weight as Simmental.

The Braunvieh breed has struggled with birth weight and calving ease and, in some cases, continues to struggle. Many producers trying to introduce Braunvieh for their positive traits have been turned off by this. Birth weight and calving ease are less of a problem in warmer climates and resource limited areas but overall it is an ongoing concern. The breed is working on these traits with more emphasis being placed on birth weight and calving ease in breeding stock every year, but the issue is not completely

resolved. If you are looking into using Braunvieh genetics, bear this in mind. The authors recommend paying close attention to EPD's when selecting a Braunvieh bull. They are helpful and there for a reason. Many purebred Braunvieh bulls can now be used in the same scenario as a producer might use Simmental or Gelbvieh bulls, with similar expected outcomes. These traits have gotten better overall but need to be kept in mind for all matings.

The second challenge for the Braunvieh breed is horns. Traditional, 100% Braunvieh are horned. In Switzerland this is not seen as a negative trait, with most cattle retaining their horns throughout life. Higher percentage animals in the United States are more likely to carry at least one horned gene with the percentage of homozygous polled animals increasing with decreasing percentage. There are currently a large number of high quality heterozygous polled cows within the breed with more high quality homozygous polled animals available every year. Consequently there are more homozygous polled bulls available every year as well. If this is an important trait to you, insist on having an animal tested before purchasing. The test is relatively inexpensive and can prevent headaches later on.

With horns can also come scurs. These are not technically horns and animals that are homozygous or heterozygous polled can still possess scurs. Cattle do not seem to use scurs in the same capacity as horns but they can be a nuisance. Scurs are present in most traditionally horned breeds to some extent. Currently there is no DNA test for scurs but adhering to homozygous polled breeding will minimize their occurrence.

The third major challenge facing Braunvieh today is color. Traditional colored Braunvieh have the same coloring as a Brown Swiss dairy cow. Because of this coloring, many immediately assume Braunvieh are a dairy animal, but today's Braunvieh is primarily a beef cow. They can, however, be milked, which we explore in another article. Living in Wisconsin, I've personally had more comments about coloring than anything else. Examples include: "How do you like those Brown Swiss?" or "That's the beefiest dairy animal I've ever seen." My feed guy once commented "I thought they were just Brown Swiss, but when I got close I realized there's a lot of meat on those things."

The other challenge related to color is when Braunvieh are used in crossbreeding or commercial programs. A full discussion of coloring in cattle is beyond the scope of this article but, in short, it's complex. Traditional coloring in Braunvieh is considered a wild type, just look at a picture of a deer next to a picture of a Braunvieh. This coloring helps with heat tolerance and adaptability but can make crossbreeding a challenge. Braunvieh coloring is also generally recessive. Therefore, when crossed with other breeds, Braunvieh can unmask underlying color schemes that have long been overshadowed by more dominant traits. One such example is when Braunvieh are crossed with red breeds, particularly red British breeds. When this mating is undertaken

brindle coloring can be unmasked, but it is variable. A personal observation is crossing Braunvieh with Hereford cattle. When crossed with Line 1 Herefords, there is minimal to no brindle pattern in the offspring but other lines can produce an animal with prominent and striking stripes. Commercial producers need to bear this in mind if they have any red in their breeding history as brindle coloring may be unmasked by using Braunvieh.

Aside from brindle, Braunvieh cross cattle can produce other challenging color schemes. These challenges can occur when Braunvieh are crossed with another non-dominant color. Braunvieh crossed with Fleckvieh (brown x red) have produced a black calf, other times a tan calf will result.

Braunvieh can be colored black while testing negative for a "black" gene which is then not passed on to their offspring. Some Braunvieh have a dark brown or "dunn" color which can produce a variety of colors in their offspring. This dunn color is present in both fullblood and purebred animals. To be clear, it is not known if this is the same "dunn" pattern found in Highland cattle. Braunvieh can be varying shades of brown depending on blood line. Some blood lines are known to be darker or lighter and can produce an almost white or black calf.

In the past, an albino gene was present within the Braunvieh breed. This can be tested for and has all but been eradicated. If this is important to you, there is a test for the albino gene which can be obtained for a modest price.

Braunvieh are not known to possess a unique diluter gene. They have been crossed with breeds that do carry diluter genes over the years so the presence of one is possible and not currently tested for within the breed.

<u>Incorporating Braunvieh Into Your Herd</u>:

How best to incorporate Braunvieh into your operation depends on your goal. Each strategy has its benefits and drawbacks. It is important to first think about what you are trying to accomplish before deciding on a plan. Consider your situation and do your homework! Talk to people who raise Brainvieh. There is a BAA membership directory available on the Braunvieh Association of America website (www.braunvieh.org). Braunvieh folks like to talk about their cows. At all times it is important to keep in mind the challenges mentioned above to avoid disappointment and surprises.

If you are looking to get started in cattle and feel Braunvieh might be right for you, I'd suggest visiting someone who raises them. Depending on where you live this might be easier said than done. Talk to others in your situation, select a few females either through private treaty sale or a multibreeder sale and an appropriate bull. Do your homework on all of the animals you're interested in as well as the breeders to make sure you're getting what you want.

If you are a small or large commercial operation looking to branch out or sample some of the traits Brainvieh are known for, the easiest way is to purchase a few Braunvieh cows or heifers and integrate them into your herd. I would suggest keeping the above challenges in mind and purchasing from a reputable breeder. If you live in Fescue country, consider cattle raised around Fescue or buying them young. Producers using a Black Angus bull or a homozygous black bull from another breed should see black or dark brown calves with similar calving results to the rest of your herd.

The other easy way for small to large commercial herds to sample Braunvieh is to purchase a bull. The MARC data cited above is almost exclusively from this scenario. Depending on your type of herd, there is a Braunvieh bull out there to fit your needs. Consider calving ease, color preference and carcass goals. Producers selling fat cattle on the grid based on yield grade and quality grade will likely see an improvement in one or both by using a Braunvieh bull.

Quite possibly the best use for Braunvieh in the large commercial operation might be in making commercial F1 females, a "black baldie" alternative. Black Angus females crossed with Braunvieh bulls will produce polled and black calves. These F1 females will possess all of the positive traits mentioned above along with the expected hybrid vigor. These cattle have been proven to be fertile, adaptable, efficient and have good longevity (see above). The steers from this F1 mating will be black and polled and quite possibly improve your performance on the grid in one generation. If those F1 Braunvieh x Black Angus females are then crossed back to a terminal, homozygous black bull, the offspring will be black and do very well on the grid. In this way a large commercial producer can take full advantage of the positive Braunvieh traits without taking a penalty on sale day.

One way to approach this is by using BraunX bulls at any point in the process. These bulls will be homozygous polled and homozygous black minimizing the risk of horns or color changes in the future.

Conclusion:

Braunvieh are a maternal breed that brings carcass merits and adaptability. Centuries of selection in the Swiss Alps, and 40 years of commercial use and study in the US, have confirmed these benefits. The breed still has some challenges to work through and Braunvieh may not be the perfect cow in every situation, but they deserve to be considered.

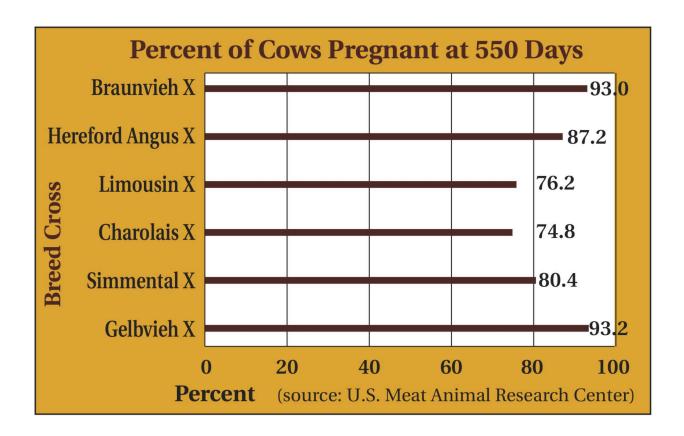
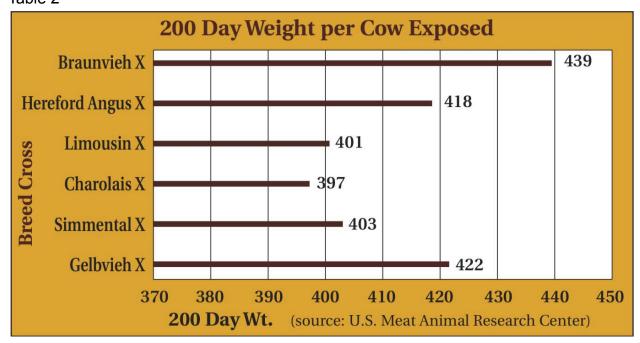


Table 2



Braunvieh: The Homesteader's Cow

Braunvieh evolved over thousands of years in the harsh terrain and climate of the Swiss Alps. In this environment producers cannot support large herds with most being relatively small by American standards, even to this day. Traditionally, most families owned one or two cows. The cows lived and worked alongside their owners, frequently under the same roof. In this scenario cattle had to be docile, friendly, functional, and easy to work with. They needed to provide the family with milk and protein with the least input possible gleaned from the alpine pastures. In other words, they were "family cows."

We don't generally think of it in the same terms, but a family living and working in the Alps along with their animals, was homesteading. It was the epitome of small scale agriculture, a "backyard farm" if you will. They had a cow or two, raised a few other animals, and grew what food they could. The environment and terrain did not allow for anything else. In this scenario the family cow had to be calm and easy to work with, she had to produce plenty of milk for her calf and the family, but not so much that she had problems. If she produced more milk than her calf or family needed, that milk could be sold. Milk components or "solids" were also important as it was easier to store and transport cheese than raw milk. As the cheese industry evolved and grew, so did the cattle that supplied it. Just as importantly, the calf also needed to produce meat for the family. A scrawny, bony, inefficient calf was simply not functional. A cow that produced more milk than her calf could consume developed udder problems. Simultaneously, she consumed more resources than a small farm in the Alps could provide. In this environment, people needed an efficient cow that produced milk, plenty of meat, was easy to handle and did it all on limited forage. Out of this environment stepped Braunvieh cattle.

Braunvieh are frequently described as a gentle, "family cow" by many who own them, especially first time Braunvieh owners. This is not surprising given they spent centuries fulfilling that role in Switzerland. Producers having experience with other breeds often comment on how easy Braunvieh are to work with and how docile and calm they are in general. Owners are often surprised at how easily mature cattle can be adapted to a small scale operation, or even halter broken. With a little patience and effort, they seem to adapt effortlessly to their humans. Of note, this trait often tracks percent Braunvieh with higher percentage animals adapting to the "family cow" role more easily. A personal observation based on conversations with producers that maintain a 1-2 cow operation is that 95% Braunvieh or higher seems to be a sweet spot for a family milking cow. Below 90% is less consistent but many wonderful and easily handled animals exist in this range.

The challenges with dairy cattle on a homestead:

When talking to homesteaders who produce milk and milk products, you will frequently hear the same story. They tend to purchase smaller breeds of dairy cattle that consume large amounts of feed all while producing too much milk and not enough meat. Dairy cattle are traditionally not good mothers and their calves frequently require more input to raise than people had hoped. The owner often has to fulfill, or at least supplement, the cow's role in raising her calf. Today's dairy cow is not bred to be a good mother, she's bred to produce large volumes of milk in a controlled environment. Because of the large quantities of milk produced, people are forced to milk their cows twice a day, without a break, or their cows develop udder problems such as mastitis. All this plus an inefficient calf that does not produce a large amount of meat. Many homesteaders want a cow that can be nursed out by her calf when they are not home and takes care of her calf with minimal assistance. Instead they are bound to that cow twice a day during lactation, in addition to caring for her calf.

The next problem with dairy cattle in a homesteading situation, is many are not hardy, self-sufficient animals. Commercial dairy cattle are effectively pampered, housed in controlled conditions to optimize milk production and minimize stress. This is often unrealistic for a small farm. Dairy cattle are given plenty of high quality feed and water in a controlled environment that minimizes the risk of diseases such as pink eye, foot rot or heat stress. Currently dairy animals are bred to thrive in this controlled environment, however when removed from a highly controlled environment they are more prone to problems. Dairy cattle are not inherently heat tolerant or drought tolerant and can be prone to pink eye and foot problems outside of their controlled environment. To compound matters, treatment of foot rot and pink eye can render the milk unusable during antibiotic treatment.

Another area that is often of interest to homesteaders and backyard farmers is A2/A2 milk. A2/A2 milk refers to milk produced by cows that naturally produce only the A2 beta-casein protein. Most commercially available milk contains a mix of A1 and A2 proteins. A1 is only produced in cows, resulting from a mutation at some point. Humans, sheep, and goats only produce A2. The amount of A1 and A2 present in a herd is influenced by breed with some breeds having a high prevalence of one or the other. Some individuals report that A2/A2 milk is easier to digest, being the protein produced by humans, and may cause fewer digestive issues than regular milk. A2/A2 milk still contains lactose and is not suitable for those with lactose intolerance.

Benefits of using traditional dairy breeds for homesteading:

- 1. Readily available
- 2. Docile, Easy to work with, used to being milked
- 3. Large volume of milk if you're able to milk daily and have a use for it
- 4. Milking records and history

- 5. "Designed" to produce milk
- 6. Mothers are not "over protective" of their calves

Problems using traditional dairy breeds for homesteading:

- 1. Large volume of milk produced by dairy cattle exceeds what many families can consume / use
- 2. Dairy cattle require milking twice a day, even when suckling a calf
- 3. Dairy cattle are often poor mothers
- 4. Dairy cattle consume large amounts of feed to produce milk
- 5. Dairy calves can be labor intensive
- 6. Dairy calves, even cross bred to beef, are not as efficient as a beef calf and depending on the cross, may not produce a carcass with as much meat as a beef calf. Some Angus bulls crossed with Holstein can produce a meaty carcass but are still not as efficient at producing meat as a straight beef animal.
- 7. Many dairy breeds are not as hearty as beef cattle

Homesteader cow wish list:

- 1. Docile, family friendly, easy to work with
- 2. Produce enough milk for the family and a calf
- 3. Can go days without being milked if need be or milked daily if desired
- 4. Produce high quality milk with plenty of solids
- 5. Good mother
- 6. Produce a meatier, more efficient calf
- 7. Efficient, able to produce milk on limited or all grass forage
- 8. Disease and problem free
- 9. Hearty / sturdy cow that is heat and drought tolerant
- 10. Good fertility with the availability of sexed semen
- 11. High percentage of A2/A2 mothers
- 12. Longevity

This is a long list of wants and we'll address each as it relates to Braunvieh cattle.

#1: Braunvieh are a docile breed and easy to work with. They evolved over the centuries in the Swiss Alps as a dairy animal in close proximity to their family and retain these traits. For the homesteader, most Braunvieh for sale have not been milked, so initially they may require more patience and effort to get started. This is where a higher percentage or fullblood animal may adapt more quickly. Another suggestion is to start

with a young heifer before her first calf. This will allow you to bond and work with your animal while she's smaller and before she's expected to be milked.

- #2: People who milk Braunvieh do so by separating the calf the night before and milking the cow in the morning. They can consistently yield 1-3 gallons of high quality milk. Some only milk 2 quadrants when lower volumes are needed. The calf is then returned to its mother and allowed to nurse. The calf is left with the cow for the remainder of the day getting plenty of milk to grow.
- #3: Braunvieh do not need to be milked daily by the homesteader. If milk is not desired, the calf is left with the cow. The cow can be left with the calf for days or weeks and not milked with no negative effects on the cow or her udder. It may take some patience to get her back in the routine of milking however.
- #4: Braunvieh milk is high in solids with high levels of beta-casein, which is excellent for cheese making. Braunvieh milk is higher in butterfat than milk from Holsteins but not as high as that from a Jersey.
- #5: Braunvieh are excellent mothers and used in the commercial beef industry for their maternal qualities. They can be very protective of new calves which is in stark contrast to the average dairy animal. This is a big difference for people used to working with dairy cattle that can have a calf and walk away. Care needs to be taken when dealing with a new baby and a Braunvieh cow. After a few days the cow will be less protective but will continue to nurture her calf until weaning.
- #6: Braunvieh evolved in a resource limited environment in the mountains where efficiency was necessary for survival. Braunvieh are known for their efficiency and carcass merits in the beef world. Braunvieh frequently win carcass contests and score well in efficiency testing and feed outs. The breed continues to measure sires for these characteristics in both short and long term programs.
- #7: Braunvieh do not require high quality feed to produce milk and a calf. This can be accomplished on grass alone, although if resources are extremely scarce milk production will decrease. Under drought conditions that would be difficult for a dairy animal to function, Braunvieh can continue to produce milk and raise calves.
- #8: Braunvieh are known to have low incidence of pink eye and foot rot, they are sure footed with strong sturdy hooves. These traits are known in the beef world and allow them to function with fewer problems than many beef and dairy breeds.
- #9: Braunvieh are sure footed and used in diverse climates throughout the world from the high mountains and arctic to the tropics. They are known for their adaptability and resilience.
- #10: Braunvieh have high levels of fertility and are amenable to AI or bull based breeding programs. There is some availability of sexed semen within the breed but not to the extent one would find in the dairy world.
- #11: The prevalence of the A2 gene in Braunvieh is harder to come by and not routinely tested for in the U.S. If this is something that is important to the producer, I

highly recommend testing the individual animal. The best information on this comes from Switzerland, where all cattle are tested, and the basis for Braunvieh around the world originated. The percentage of A2/A2 in Original Braunvieh in Switzerland is 67%. Anecdotally that would seem to be the case in the US, however the test is reasonably priced so testing is prudent to ensure a buyer is getting what they need.

#12: Braunvieh routinely produce calves until the age of 12-14 years. Some have gone well past that. Milk production likely falls off with time but the rate and extent are not well documented, especially in the US.

Braunvieh developed over the centuries as the animal of choice for small, family farms producing milk and meat on limited resources. They lived closely with their family and functioned well in that role. Those traits persist today in the Braunvieh breed making them a viable option for the homesteader and backyard farmer.