



Origin, Migration of Hereford Breed Character

According to historic record, the Hereford breed of cattle originated some 300 years ago in the hilly grasslands of Herefordshire, England. The original local “breed” was likely solid red, resembling the types that prevailed in neighboring counties of Devon and Sussex counties.

From the rolling hills of Wales, a stoutly made white breed of cattle with red ears was reported to be crossed with the smaller “reds” of Herefordshire. The blending of the blood lines of those two self-colored populations probably accounts for the original broken colors, including a variety of brockle-face, roan and traditionally marked whiteface with the white underpinning.

It is written that there was, in those early days, a controversy among English breeders in the area of whether brockle-face cattle were superior to solid whiteface cattle. Other cattle were imported from the Netherlands into Herefordshire at the time with similar red and white broken markings that may also have attributed to Herefords’ origin.

Interestingly enough, as the popularity of these unique markings formed a favorable impression in the minds of breeders, it is a documented fact that the “Hereford-marked” cattle were also much stronger statured, superior in conformation, higher in quality and more productive.

What was likely an attractive heterosis boost in these first crosses with their unique marking created an established preference in subsequent

breeding operations, and the new color pattern was established as the means to superior genetics of the time.

The “hallmark” of the Hereford breed became the gold standard of breed character globally and reigns true to this very day. Certified Hereford Beef (CHB®), the only U.S. Department of Agriculture (USDA) recognized branded beef program carrying the Hereford name, is based on these genetically fixed markings that continue to be linked to superior quality beef.

Over time, breeders have influenced their own biases into color selection of the cattle. This tendency was particularly true before modern performance recording began. Markings were linked to, at many times, anecdotal evidence or within herd observations of economic difference in lines and genetics within the breed.

These breeder observations have led to biases around the world that have been passed on from generation to generation of breeders. In the U.S. the lineback has been an unacceptable marking and culled from propagation for decades. Once feather necks were very popular, today, the preference is conservative marking, eliminating much of the white from over the crest.

Red to the ground is deemed by many as the preferred “bell and whistle,” not unlike the extras on a new Cadillac. Pigmentation around the eyes, long related to UV light protection and cancer eye prevention,

has become even more popular, and the once extreme whiteface and eyes, udder and scrotum are now preferred in red pigments for sound functional reasons.

The red hide color itself has migrated over time. The once mellow yellow that propagated the West for more than 50 years has now become darker cherry in color. There are some lines approaching an almost chestnut or chocolate red. South Americans have invested strongly in the darkly colored U.S. Hereford with the pigmented or even goggled eyes.

As a whole, the breed has become much more conservatively marked in this new millennium of selection, and with that migration to more solid color, there is always a shift in breed character standard. When I was a 4-H member in the mid-1980s and as recent as the last 10 years, any steer without a feather neck and strong white underpinning, the traditional standard of the century, might be sifted from a major Hereford steer show.

Today, there is the occasional registered Hereford that almost looks like a red baldie getting the high eyebrow from some in wonderment but, through DNA technology, tracks as pure as the rest.

CHB live specifications

The downside of losing breed character may be an identity problem down the road. In recent years, more and more Hereford-influenced black baldies have been disqualified from the CHB program because they did not

meet the 51% whiteface characteristic written into the specification to assure the animal is at least half Hereford. CHB packers see more and more heavy brockle-faces that are known progeny of Hereford bulls but are non-qualifiers of the program.

This fact is forcing CHB to consider changing the live animal specification slightly to allow for less white on the face. In several of AHA’s heterosis projects where Hereford bulls were turned out in large pastures with Angus bulls and then the calves were later DNA parent verified back to a sire, we have seen Hereford-sired calves thrown as straight blacks with no Hereford markings.

Obviously, there are ways to track genetics of feeder cattle from gate to plate; however, the convenience of knowing breed type of feeder cattle through traditional fixed markings has value. Baldie cattle are quickly becoming a gold standard for commercial cattlemen. The uniqueness of the Hereford breed and its vast difference in genetics from other breeds is an asset that today is paying dividends for Hereford breeders.

The question of today is: Should those traditional markings be preserved to support the “whiteface” brand that is growing in popularity? Or should color even matter unless it’s related to something functionally important?

This migration in breed character may not have any economic relevance in today’s high-tech, performance-based agriculture society we now work in. However, it is perplexing that color many times does trump documented performance, even today.

Hypothetically, would Hereford breeders ever consider using a white-legged, line-backed bull that is balanced across traits and proves to be the highest carcass quality bull in the breed? It’s an interesting question and one that may come closer to reality as genomic technology allows us to understand more about what’s under the hide and in the “engine room.”

What is certain, however, is biases will always prevail in our very independent livestock breeding business, which makes this business even more interesting. **HW**

Bradshaw named new education and information services coordinator



Christine (Christy) Bradshaw was hired as the new education and information services coordinator for the American Hereford Association (AHA).

Ultimately, her role will be to develop educational programs to assist Hereford breeders in the understanding of online data submission and best practices for Whole Herd Total Performance Records (TPR®) participation.

Christy Bradshaw

Raised on an Angus and Charolais ranch in Idaho, Christy served as a director of the American-International Junior Charolais Association and was awarded the outstanding junior member award for that organization.

She attended Casper College in Casper, Wyo., where she was a member of the livestock judging team before completing her

bachelor’s degree at Kansas State University (K-State) in May. While in college, she was a member of the K-State Collegiate CattleWomen. She also completed beef quality assurance and beef cattle care training as well as the Masters of Beef Advocacy program.

In addition to her hands-on cattle knowledge, she worked at the plant pathology research lab at K-State, where she gained extensive knowledge of DNA testing and molecular biological techniques.

AHA Executive Vice President Craig Huffhines says, “We are excited to have Christy as a member of our Hereford team. She will focus on helping our members utilize the technology available to submit and maintain Hereford data.”

Christy lives in Overland Park, Kan., and started working at AHA headquarters in Kansas City in mid-July. **HW**