Here's to the Blue

TULSA STATE FADE

Steve Kinser, Sand Kastle Ranch near Hugoton, KS, with some help from the very capable Miss Lacy DeShazo of Bokoshe, OK, accepts the award for Grand Champion Halfblood bull at the 2012 Tulsa State Fair. The bull is ½ Blue and ½ Blue X, with Angus on the top and Gelbvieh on the bottom.

Years of positive development pay off for breeders of American Blue Cattle

hile they may look like the Arnold Schwarzenegger of the cattle industry, they are gentle giants," says Steve Dollarhide.

The body-builder-like cattle are the **American Blues**, our country's version of Belgian Blues, developed with a focus on the unique muscling genetics of their Belgian ancestors, while improving calving ease and lowering birth weights to get away from the caesarian section stigma Belgians often carry.

"Their undeniable ability to add edible meat and bulk to other breeds of cattle differentiates the American Blues from any other breed of cattle," says Dollarhide, of Haworth, Oklahoma, an American Blue producer for more than 10 years, and Vice President of the **American Blue Cattle Association**. "American Blues can add the muscle and increase the weight gain naturally," he adds. "This could satisfy many consumers who are looking for more organic alternatives."

Dressing out between 68 and 72 percent, American Blues have one of the highest yielding carcasses in the industry. The breed's extraordinary muscle development is due to an inactive **myostatin** gene.

"The myostatin gene typically limits muscle development, but the inactive form allows for a change from *hypertrophy* to *hyperplastic* muscle growth," explains Steve Kinser, Treasurer of the American Blue Cattle Association and a producer in Hugoton, Kansas. "Instead of developing longer, thicker.

BY JAIME PULLMAN

a producer in Hugoton, Kansas. "Instead of developing longer, thicker, courser muscle fibers, an animal with this trait can have twice the number of muscle fibers per muscle bundle, but the fibers will be finer and shorter. They do not have any extra muscle bundles, just each muscle bundle is larger and the volume of tough connective tissue is reduced. This trait also reduces the deposition of fat to create a very lean product."

American Blue beef also has some of the healthy attributes that are important to modern consumers, along with flavor. Certified American Blue ground beef contains 7 grams of fat, compared to 30 grams for regular USDA ground beef and 10.5 grams of



American Blue Cattle are large-framed with exceptional muscling due to an inactive myostatin gene. High-yielding carcasses are an obvious result of this muscle growth.

USDA average chicken breast (with skin). Protein matches up at 25 g for Blue, 18.78 for regular USDA ground beef, and 23.7 for chicken, and cholesterol tests at 64 mg for Blues, 96 mg for regular USDA ground beef, and 72.1 for chicken breast.

And the leanness doesn't impact tenderness. A 3-year test done by the USDA's Meat Animal Research Center in Clay Center, Nebraska found that Blue crossbred cattle had a lower shear value than the contemporary average of Hereford-Angus; 12.8 versus 12.9, with comparable tenderness and flavor, less fat cover (0.21 inch versus 0.45 inch), 16% less marbling and 14.2% more ribeye.

Kinser says that the need in Europe to produce a large amount of meat on a small amount of land has rewarded breeders with the heaviest calves, with Blues sometimes selling for more than twice that of other breeds. But the size comes with a different kind of price.

"This economic pressure has persuaded breeders in Belgium to breed for the heaviest muscled calves they can get at birth to get this extra value. So they are basically breeding for calving difficulty knowing that a C-section is just a small added expense for that high value calf," says Kinser.

In order to separate themselves from the C-section reputation, and by promoting and developing easy calving bloodlines with a focus on conformation at birth (ideal calves are low muscle at birth but high muscle at 3 to 4 months old), British and American breeders have renamed their cattle British Blues and American Blues, respectively.

EUROPEAN ORIGINS

The Belgian Blue originated from Shorthorn and Friesian cattle, with some Charolais influence, in Belgium during the late 1800s. They were primarily dual purpose until the 1950s when heavy muscling was developed during a selective breeding process. Belgian Blues arrived in the U.S. for the first time in 1978. American producers have been putting their stamp on the breed ever since.

Despite their heavy muscling, American Blues are very feed-efficient. The average Blue cross feeder requires just under 7 lbs. of feed per pound of gain. In addition, research has shown that increased muscle size is associated with smaller organ size, resulting in reduced voluntary feed intake and increased feed efficiency.

Dollarhide says American Blues are versatile, can do well on pasture or in the feedlot, and will convert feed to edible meat on any breed or frame of cattle.

In addition to their impressive yields, American Blues are also docile and adaptable to a variety of climates and production environments.

Though there is a lot going for them, the breed still has some challenges, particularly overcoming negative stigma associated with calving problems.

"The number one issue the American Blue breed faces is fear of large birth weights and cesarean sections," explains Dollarhide. "While that was a concern and a problem when the breed first entered the United States in the late 1980s, American Blue breeders have worked diligently with the proper genetics to lower birth weights and improve feet and leg structure for overall soundness. Today, the only time a C-section is performed in the breed is when someone

American Blue Cattle

BREED: American Blue Cattle

COLOR: White, blue roan, or black.

ANCESTRY: The American Blue began as the Belgian Blue, which originated in central and upper Belgium when the local red-pied and black-pied cattle were crossed with Durham Shorthorn in the late 1800s. Some Charolais influence during the 19th century is also suggested.

HISTORY: Originally a dual purpose breed, beef production became the focus following World War II, when Europe's economy demanded increased beef quality and quantity. During the 1950s, the Belgian cattle underwent a selective genetic breeding and development program conducted by Professor Hanset at the AI Center in the Province of Liege. This program created their unusually heavy muscling.

The first Belgian Blues were imported to the United States in 1978. Today, American Blue Cattle are their own fullblood registered breed, independent from their Belgian relatives after years of breeding for easier calving, lower birth weights, and improved structural soundness.

BREED CHARACTERISTICS: Large framed cattle with exceptional muscling due to an inactive **myostatin** gene, and therefore high-yielding carcasses. They are known for quiet temperament, early maturity, short gestation, hardy calves, adaptability, excellent feed conversion, and tender lean meat.

QUALITY AND YIELD: Yield mostly 1s, grade 80% Select due to lack of marbling, but tenderness overrides the lower grade in taste tests.

WEIGHT: Mature fullblood bulls can average up to 2750 lbs., and fullblood mature cows to 1650 lbs. Average birthweight for fullblood Blues is 96.8 lbs. and 79.9 lbs. for a crossbreed.

NATIONAL ORGANIZATION AND REGISTRY: The American Blue Cattle Association located in Nacogdoches, Texas. For more information: Visit the association website at www.americanbluecattle.org or call 936-652-2550.

is breeding fullbloods and they cross the wrong genetics or exceed nutrition requirements. In crossbreeding operations, a breeder will not experience any more calving difficulties when using American Blues than the breeder would with any other breed."

Stanley Jones, of Jones Cattle Company in Nacogdoches, Texas took a chance on Blues almost thirty years ago for the leaner, healthier beef and hasn't looked back. Jones started crossbreeding with genetics obtained from Canada, and later imported the first live Blues ever brought to the United States directly from Europe. Today, he raises and markets fullblood American Blues and crossbreed calves.

"Cattlemen in this country can benefit from American Blues' outstanding muscle development, ease of calving for crossbreeds, exceptional lean tender meat, excellent feed conversion, and high yielding carcasses," Jones shares.

"The best way to start breeding American Blue cattle is to start a crossbreeding program," Jones advises. "Then ask yourself why you did not start years ago."

