

SIMBRAH BEEF BRIEFS

Guidelines for Breeding Simbrah Cattle

Simbrah combines the strengths of the two most populous breeds of cattle in the world — Simmental and Brahman. The fertility, milking ability and rapid growth of the Simmental is complemented by the heat tolerance and hardiness of the Brahman.

The initial development of the Simbrah breed occurred predominantly in the Gulf Coast region of the U.S. However, the popularity of the Simbrah cattle now extends to many parts of the country.

The Simbrah Registry

The American Simmental Association maintains the registry for the Simbrah breed. Two categories of Simbrah are admitted to the registry. Animals of 5/8 Simmental and 3/8 Brahman breeding are registered as purebred Simbrah. Other combinations of not less than 1/8 Simmental, 1/8 Brahman and not more than 3/8 other breeds are registered as percentage Simbrah.

The wide range of crosses, from 1/8 to 3/4 Simmental and 1/8 to 5/8 Brahman, provides excellent flexibility for breeding programs. Breeders can select combinations that

perform best in their production environment and which also best satisfy market demand in their area. By allowing up to 3/8 of other breeds in Simbrah cattle, breeders can also introduce other genetics, such as the polled trait, into their herd.

Breeding Purebred Simbrah

A purebred animal consists of 5/8 Simmental and 3/8 Brahman breeding. The degree of heterosis (hybrid vigor) in the first generation purebred will depend on how Simmental and Brahman are combined (see Table). Matings of purebred Simmental and 1/4 Simmental x 3/4 Brahman parents result in a greater degree of heterosis in the calf than matings of 3/4 Simmental x 1/4 Brahman and 1/2 Simmental x 1/2 Brahman parents.

Differences among the dams used in the cross will also influence performance. As Brahman breeding of the dam increases, calf birth weight will generally decrease; as level of Simmental breeding of the dam increases, calf birth weight and calf weaning weight will generally increase.

Four Ways to Create Purebred Simbrah

Registered Sire	Registered Dam	Comment
1. Purebred Simmental	1/4 Simmental x 3/4 Brahman (foundation Brahman)	Most heterosis overall; increased weaning weight without increased birth weights.
2. 1/4 Simmental x 3/4 Brahman (foundation Brahman)	Purebred Simmental	High level of heterosis in calf; highest expected weaning weights, but also potential for increased birth weights.
3. 3/4 Simmental x 1/4 Brahman	1/2 Simmental x 1/2 Brahman	Moderate level of heterosis in calf and high degree of maternal heterosis; weaning weight potential similar to option two, but with less expected increase in birth weight.
4. 1/2 Simmental x 1/2 Brahman	3/4 Simmental x 1/4 Brahman	Moderate calf and maternal heterosis; weaning weight potential somewhat less than other options.

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Breeder Goals

Simbrah breeders should strive to produce a breed of beef cattle that is acceptable worldwide — truly, “The World’s Breed.”

- Adaptable to many environments and management systems.
- Able to maximize production income while minimizing production costs.
- Bulls able to settle a high percentage of females in a short breeding season.
- Females able to calve without assistance by 24 months of age and every 12 months thereafter.
- Feeder calves able to adapt quickly to the feedlot environment, gaining rapidly and efficiently, and produce a high percentage of lean meat of acceptable quality.

Trait Selection

Sound Feet and Legs

Legs should be well-placed and relatively straight with a moderate degree of angulation to the hock. Avoid animals with extremely straight rear legs (post-legged), with extreme hock angle (sickle hocked) or with weak pasterns.

Feet should be straight, allowing the animal’s weight to be carried evenly. The hoof should be almost round, relatively large in proportion to body size and have two claws of equal size and shape. Avoid animals whose feet “toe in” or “toe out,” whose hooves are crooked or small in relation to body size.

Reproductive Potential

Both males and females should show potential for high reproductive performance. Simbrah bulls should appear to be strong, virile and athletic. The testicles should be well developed, of equal size and hang straight in the scrotum. The sheath should not extend below an imaginary line drawn from the knee to the hocks. The prepuce orifice should be small and open at a 45 degree angle to the body.

Avoid bulls lacking secondary sexual features, those with abnormal or inadequate testicular development, a pendulous or funnel shaped sheath, a large prepuce opening, a prolapsing or lazy prepuce.

Simbrah females should show evidence of femininity. They should breed at an early age, calve at regular yearly intervals and show evidence of good mothering ability.

Their udder should be well attached both front and rear, have a level floor and four well-placed medium size teats. Females should produce a generous volume of milk adequate to sustain the growth of their calf until weaning. Avoid females that show evidence of masculinity and are

late breeders. Cull those that have pendulous udders or large misshapened teats as well as those that fail to mother their calf and provide adequate milk.

Frame Size and Type

Selection for reproductive efficiency will ultimately determine the frame size and type best suited to each production environment. Additional constraints may come from different management and marketing systems.

In general, Simbrah should be of medium to large frame, have a strong, straight topline showing muscularity uniformly from behind the shoulders through the loin area, and thickness in the hindquarters and lower stifle area. Breeders should avoid extremely large frame sizes associated with delayed puberty, larger mature size and increased feed requirements of breeding females. Extremely small as well as extremely large frame size can also mean unacceptable market weights of commercial feeder and slaughter cattle.

Breeders should also avoid extremes in muscling. Very heavy muscling is associated with calving problems and infertility. Light muscling simply means less meat. Simbrah animals should show sufficient body capacity and fleshing ability to sustain satisfactory reproductive performance with limited amounts of feed. Avoid animals that are swayback, pinched behind the shoulders, have a small heart girth or lack spring of rib.

Simbrah should also have a moderate amount of dewlap while still maintaining a relatively clean naval flap and sheath area. The skin contains important sweat glands that help the animal cope with hot weather.

Temperament

A good disposition is also important. Cattle should be relatively quiet and easy to handle.

Performance in Production Traits

Final selection should be based on actual performance in production traits. ASA’s herd performance and national sire evaluation programs can help breeders to evaluate both individual and expected progeny performance in traits such as calving ease, birth weight, weaning weight, yearling weight, maternal calving ease, maternal weaning weight and maternal milking ability. Check with ASA for more information.

To be successful in today’s industry, Simbrah breeders must produce functional cattle with measured performance in traits important to commercial cattlemen.