

Genetic Improvement and Crossbreeding in Meat Goats
Lessons in Animal Breeding for Goats Bred and Raised for Meat
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Appendix A. Available Genetic Resources Among Breeds

Boer

The Boer breed is characterized by a red head and at least a portion of the neck, and a white body. They have large pendulous ears. Some breeders have chosen to breed and promote solid color Boers, but there is little scientific evidence that they have any unique merit in productivity. Several Boer breed associations exist in the U.S. and each uses a set of standards related to appearance and function. The standards include acceptable characteristics, characteristics that discriminated against, and characteristics that are disallowed. Details are available through breed association web-sites. The breed was developed and improved in the Republic of South Africa. Boers have been present in the United States only since about 1994 and arrived through several routes of importation. The Boer has an even disposition, grows rapidly, and a muscular appearance. Boer sires often mark their crossbred offspring with the characteristic color markings so that they are identifiable in the market place. There is some evidence that the breed as a whole may be relatively more susceptible to internal parasites when used in the warmer, humid regions of the US.

Kiko

This breed is generally solid white or cream in color although there are some of darker colors including black. Kiko goats have erect ears. The Kiko was developed in New Zealand to create a more muscular and productive indigenous goat. They have been in the US only since about 1995. They grow rapidly, are somewhat angular in appearance, are prolific, and tolerant of rustic conditions. Although inconclusive at this writing, there is some indication the breed as a whole carries a useful level of resistance to internal parasites. They tend to be active and athletic, and are aggressive breeders.

Spanish

This “breed” is actually a type of local goat that on the whole has been subject to some selection pressure for various production traits such as prolificacy and weight for age. The name is used loosely, at times, to refer to local or brush goats, but strictly speaking this is a misnomer. Although scattered across much of the US, most Spanish goats are located in Texas and it has been breeders in that state who have been responsible for its improvement and recognition. Spanish goats can be any color or color pattern. They are moderate in size and rate of growth. They are especially tolerant of difficult conditions and forage well on local plants. Spanish does are prolific and produce enough milk for moderate growth rates of the kids. They are believed to be relatively tolerant of internal parasites. Spanish goats are very active and can be considered flighty. Survival rate is good. Because they have often been used in upgrading programs, availability of purebred stock may be limited in some regions.

Myotonic

This “breed” is limited in numbers, but includes a population that has its roots in Tennessee. They are relatively small in size but are characterized by a high degree of muscularity, particularly in the rear quarters. Associated with that muscularity is a genetically based condition which causes muscle fibers to contract and render the animal immobile for a few seconds after it becomes startled or excited. It is a curious condition that is becoming better understood through focused research. Details of the condition are published but beyond the scope of this learning module. The breed tends to be dark in color but there is no selection for particular colors or color patterns. They are not highly available. One of the more visible populations is a proprietary population known as the Tennessee Meat Goat based in Texas, which has been selected for a lower incidence of myotonic events and for more functionality. The breed is used primarily to introduce more muscularity into commercial stock.

Nubian

The Nubian is best known for its place in the dairy goat sector. Unlike other dairy breeds however, they have been systematically used by some producers in the goat meat production sector. The high level of milk production can be a blessing or problematic. Udder and teat structure can present challenges for young kids at initial nursing time. The breed is large which brings associated rapid growth rates. The coloring is mostly reddish, often with spots or mottling patterns. Their large pendulous ears often suggest they make a good foundation for upgrading to the Boer.

Genemaster

The Genemaster was developed as a composite breed. It is based on a foundation of 3/8 Kiko and 5/8 Boer. The breed will retain a portion of the original hybrid vigor over the next several generations. Still relatively early in its formation, there have not been studies in the public sector to verify level of performance of this genetic resource.

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