

Choosing Does for Commercial Traits

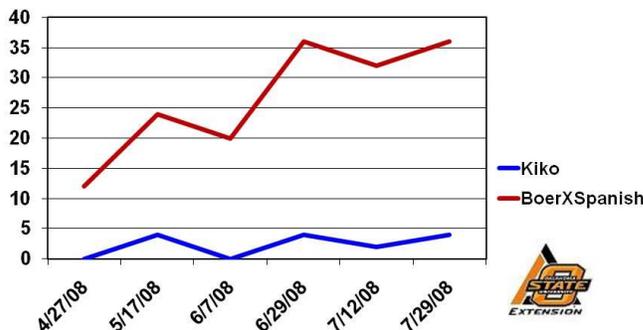
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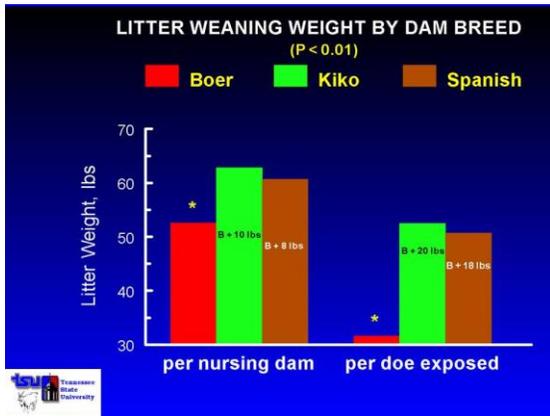
There is a lot of difference between a show goat and a meat goat. Most of the barn pampered, grain fat show goats have a pretty tough time making it on a forage based program. Additionally, the traits that a show ring judge is looking for are probably not the same traits that would allow a goat to thrive and be reproductively efficient in a range or pasture environment. High grain diets are not the ideal situation for meat goats for several reasons. To start with, goats are ruminants and need to consume forages to stay healthy. Secondly, forage based diets, with some supplementation when needed are much more economically feasible for commercial producers. Thirdly, while cattle are finished on high grain diets to induce marbling, or intramuscular fat, goats don't marble. Most of the fat deposited will be internal fat that goes to waste. Additionally goat consumers are not used to a fat product and will incriminate against it. Seed stock producers need to supply breeding animals that can thrive and reproduce with the least amount of high cost inputs if they are to meet the needs of commercial customers.

Probably the number one challenge to goat producers is the barber pole worm. This parasite kills more goats than all other predators combined. The barber pole worm multiplies rapidly under warm moist conditions. It is killed by dehydration so dry conditions help to minimize barber pole populations. Unlike other roundworms that feed on the protein in the digestive tract, it attaches to the stomach lining and feeds on the animal's blood, leading to anemia and death. The goat can suppress infestations of this parasite through the immune system, but because this is not a highly inheritable trait it takes many generations to develop this resistance. Some of our breeds today such as the Boer and the Savanna were developed in South Africa where they get less than 10 inches of rain per year. The Spanish goats have spent many generations in the dry climate of the American Southwest. These breeds have not had a chance to develop the native resistance to parasites and when they are introduced to warmer, wetter climates they have little ability to fend off the resulting heavy infestations. Frequent chemical treatment leads to worms that are not affected by the dewormer. The Kikos, on the other hand, were developed from the feral goats of NZ where 80 inches of rainfall is not uncommon. For many generations the individuals that couldn't deal with the resulting parasites were taken out of the gene pool by nature. While no goats are bullet proof when it comes to parasites, Kikos need less deworming and have much less death loss due to their natural immunity to parasites. The accompanying chart reflects the difference in the worming rates required for Kiko does versus Boer X Spanish does in a trial conducted by Oklahoma State University Extension Service and The Kerr Foundation.

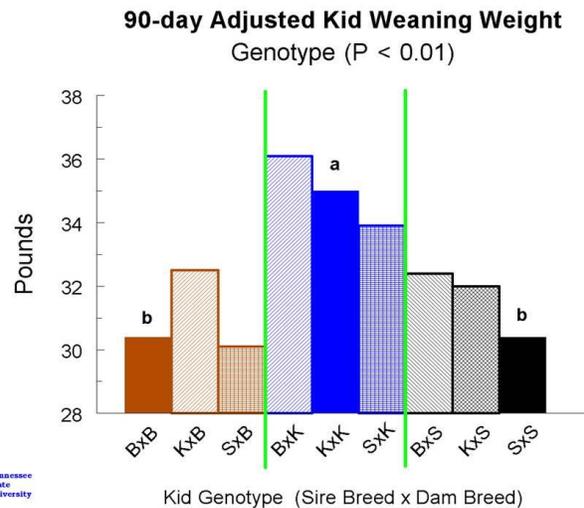
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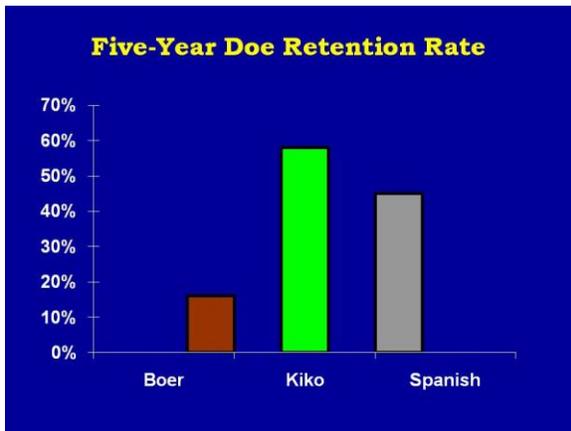
The most important trait effecting profitability for meat goat operations is reproductive performance. This is closely related to maternal ability. To be successful a doe has to give birth to multiple kids and then get them up and get them fed, even in adverse weather conditions. Newborn goats lack the ability to regulate their body temperature and can become hypothermic quickly if they don't get some help from mom. In breeds where show ring performance is important, the maternal traits have largely been bred out. It doesn't matter how good your kids look, or how fast they grow, if there are not enough of them weaned to go to market, fast growth can't make up for the lack. This chart shows a comparison by breed of number of kids weaned per doe in a 5 year study done by Tennessee State University.



The next important characteristic is growth rate. Large mature size does not equal fast and efficient growth. In fact, nutritional demand is based on body size so it is more cost efficient to maintain medium sized does, if their kids can perform well. What matters is how fast the kids can reach the optimum market weight of about 60 pounds. In their study TSU crossed three breeds in all possible ways, resulting in 9 different combinations of sire and dam breeds. Notice that the top three combinations all had Kiko mothers.



Another important economic trait is longevity in the herd. It is costly to replace does. When saving replacements you lose the opportunity to market the doe kid, plus you have about 2 years worth of expenses before you have off-setting income. The TSU trials showed a big difference for doe retention among the breeds. The chart shows their findings. The bars indicate what percentage for each breed of the original herd were still productive after five years.



It is important to note that in the TSU trials goats were housed in an outdoor environment and the doe herds and kids both utilized forage diets. Any doe that did not produce at least one live kid was culled. Kids were not creep fed while nursing their mothers. Is that the way we need to raise meat goats? If you are missing too much sleep or losing too many goats, maybe it's time to think about meat goats rather than show goats.