

Breeding Savannah Goats: Function over Form, or Not?
Brian Payne, Keri-Rose, Fort Macleod, Alberta, Canada

This article has been adapted from the February 2014 issue of the Goat Rancher magazine (Breeding Meat Goats, Function over form, or not?). My long term friend and founding director of the North American Savannah Association, Dr. Frank Pinkerton, has often expressed his concern over the unfortunate influence that the show ring has had on the development of the Boer goat phenotype.

The deep and wide front ends of the original Boer imports has been replaced with a shallow facsimile that



could never propel a hardy grazing animal over large acreages; much less, provide a meaty carcass. (I encourage you to look at the blog article on dog breeding that inspired this conversation. It is entitled 100 Years of Breed “Improvement”. Pay particular attention to the photograph of the bulldog and compare this front end structure with many modern Boer show goats. The link is <http://dogbehaviorscience.wordpress.com/2012/09/29/100-years-of-breed-improvement/>)



(The photo above is “Noster”. The first South African Boer goat to be approved for semen collection and national A.I. usage.)

In many show animals the overall depth from heart girth to flank has also been so reduced that one seriously wonders if there is enough of an abdominal cavity to allow the animal to eat the volume of roughage required to subsist. In females, the desired “wedge shape” from front to back has been replaced with a longer, more tubular profile that may compromise rather than enhance her reproductive capacity. (modern American show does next 2 photos)



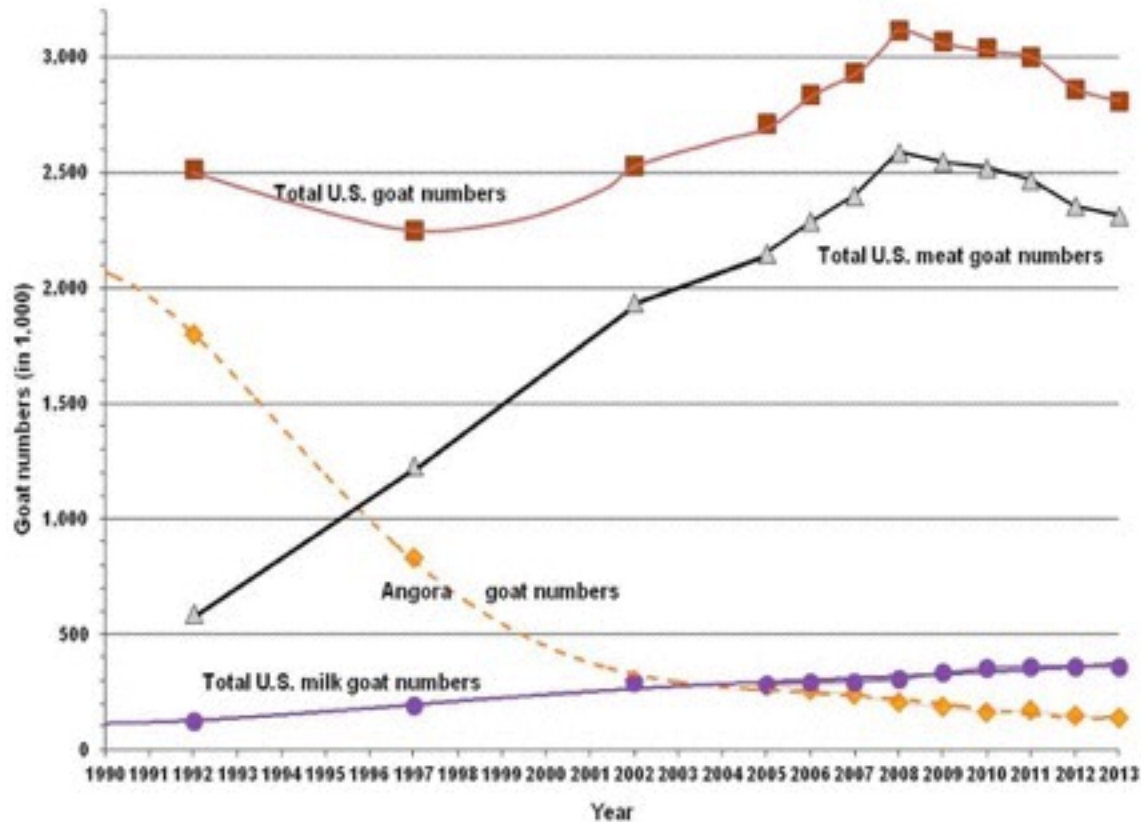


(The photo above illustrates the “wedge shape” favoured in female breeding stock by the South Africans. Nico Botha is pictured here with his (GR.Champion doe, Worcester, 1996). The photo below shows structurally correct South African females. Broad fronts but still some depth through the brisket. A powerful front end for endless miles of walking rather than the modern, weaker, phenotypes.)



Sadly, in the absence of widespread, on-farm performance testing, we can only “speculate” that “the efficient production of red meat from browse and grazing” may also be seriously impaired! Show ring “form” has so dominated the attention of the industry that the “function” of meat goats described above seems to have been forgotten! Is this the reason that profitability eludes many industry participants? Is this part of the reason that meat goat

numbers have decreased so dramatically over the past 5 years? Is the meat goat business following the dog breeding world and slowly transitioning from an industry to a fancy?



(Pinkerton/McMillin, Meat Goat Industry Update, 2013)

Many years ago I was proud to have bred the top Bloodhound in Canada. After a Best of Breed win at the prestigious Expo '86 show in Vancouver, British Columbia: the well known author and breeder, Lena Reed (Manhunters! Hounds of the Big T"), congratulated me and autographed my copy of her book with the following inscription;

"Brian – Let's hope your winners bring man-trailers into your future."

An important mentor was reminding me of the importance of breed function. In a very succinct way she was admonishing me to be a better breed steward;

“Every kennel...should make sure that working ability is not lost during the search for show bench winners. A real balance must be struck between looks and working ability, and any person seeking one of these qualities and disregarding the other is doing a great disservice to the breed.” (D.H.Appleton, Bloodhound Handbook, p.95)

“Working ability”, and the seeming failure of Boer breeders to embrace this issue; created an opportunity for the Savannah and Kiko breeds to establish themselves in the North American marketplace. As Savannah breeders, it is imperative that we do not lose sight of this if we are going to continue to grow in 2014 and beyond.

In an article written for the Canadian Meat Goat Association (“Observations of a Survivor in the Canadian Meat Goat Industry: Twenty Years and Counting”, Fall, 2012), I expressed this same challenge; of balancing visual appeal with breed purpose or function, by making a number of “observations”:

1. If you think that the profitability of your meat goat herd comes from “a well fleshed loin” or a heavily muscled hind quarter you are sadly mistaken. **True profitability from a commercial meat goat herd comes from maternal traits which are not visually apparent. Phenotypic evaluation may be enough for show ring success but individual animal identification, good record keeping and a weigh scale will be required if you want to be economically viable as a meat goat producer.**

“Reproduction is generally viewed as the most important trait of meat animal production. Reproductive output in a

meat goat herd is defined as litter weight weaned per doe exposed to the buck.” (On-farm Performance Testing for Meat Goat Doe Herds, Dr. Richard Browning, Tennessee State University, Fact Sheet)



“The trait of paramount economic concern to commercial producers is mothering ability....the best quantifiable ‘proof’ of good mothering ability, regardless of breed, is the does’ litter weight at weaning time. If your herd routinely demonstrates poor mothering capability, your tenure as a goat entrepreneur will be limited.”

(A Compilation of the Wit and Wisdom of “The Goat Man”, p. 178–9, Dr. Frank Pinkerton, retired Goat Extension Specialist, Langston, OK)

As an important footnote to this observation, readers should also be reminded that we cannot “see” parasite resistance or out of season breeding capability any better than we can “see” mothering ability. Both of these traits are also critical to economic performance and can only be identified with good record keeping and management analysis beyond the visual.

2. “Preliminary computations have shown that the only live measurements that are consistently correlated with carcass grades are the circumference of the chest/ chine (behind the front legs) and the circumference of the rear body (shrunk condition, just in front of the hip bones). These two figures measure and describe body volume; insofar as we know, no other measurement or combinations of measurements matter much....**the show ring emphasis on body length and width/ length of loin is considerably misplaced.** TAMU (Texas A&M University) proved Boers to add muscle volume to Spanish Goats, but when the ribeye area of each was divided by the weight of the carcass, there was zilch (no) difference in the inches of ribeye/lb. of carcass.....no improvement. ... (Oman, J.S., Waldron, D.F., Griffin, D.B., and Savell, J.W., 2000, “Carcass traits and retail display–life of chops from different goat breed types”, J. Anim. Sci. 78:1262–1266., as described by “the Goat Man”).

In short, the meat goat show ring has very little correlation to the production economics of the real world. You only have to look at the long “hot dog” bodies of the market kid class winners in the Goat Rancher to understand what I am saying. Also pay attention to the front view of many of the breeding class show winners and you will see that there has been a serious reduction in heart girth circumference and depth of brisket since the first Boer goat imports in the mid-nineties.

3. Long term industry observers have concluded that the average lifespan of a goat operation is seldom more than five years. An exclusive pre- occupation with the show ring, breed fancy points and seed stock sales based on show winnings; has not created long term operational viability. Purebred breeders should begin to think about diversifying their markets by creating functional, efficient replacements for the growing number of commercial producers who are not impressed with blue ribbons.

4. The Savannah breed was developed under the guidance of Dr. Quentin Campbell, the former head of the South African Mutton Sheep and Goat Performance Testing Scheme. Dr. Campbell was a strong advocate of **environmental adaptability, functional type and “survival of the fittest”**. Dorper sheep also benefited from his scientific approach to breeding program selection.

In contrast, the South African Boer development process was essentially show-ring- driven by stud breeders who were obsessed by phenotypic fancy points. An unfortunate legacy of this approach was suspect mothering ability, poor dentition and feet within the Boer breed:

“I would like to make an appeal that we think very seriously about factors, such as fertility, hardiness and mothering characteristics, all those attributes which have been bypassed in the process of breeding show animals.”

(S.W. “Boetie” Malan, president SA Boer Goat Association, Annual Report, Kimberley, 1993 – Boerbok Nuus)

“...Loskop Suid (indigenous) goats did not develop any jaw and hoof faults while a number of Improved Boer Goats did develop these faults.”

(op.cit. Boer Goat Trial at Ellisras, Dr. Johan Henning)



Boer goats in America have not performed well under “hard conditions”.

Over the past year I have been approached by Savannah “enthusiasts” who feel that NASA’s bias in favor of performance is something divergent or counter to the vision of breed founder, Lubbe Cilliers. It was explained to me that our insistence on “performance selecting the Savanna(h)” was leading to the development of off-coloured, poorly pigmented and wild horned individuals and that NASA was not protecting the breed standard. Furthermore, it was argued, breeding Savannahs is something different “than trying to make the best meat goat with performance and selection.” In essence, we should all focus on breed fancy points (pigmentation, horn shape, soft pure white coat) because the “back-to-the-land” baby boomer generation wants to buy on “looks”.

In my mind, blindly following “form”; as our passionate NASA detractor suggests, would firmly push the Savannah breed development process towards the show ring and a hobby “pet parade”. That shadowy world of breed “fancy” where ‘it’s all about the looks’.

Lubbe Cilliers’ vision was for a “functionally efficient goat” that is “able to utilize a wide range of vegetation” and also “able to breed at any time of year”. Excellent mothering combined with muscularity and hardiness is the breed ideal that we have to remain focused on. Performance testing is the only route that NASA is committed to. South African experience (our Savannah heritage) suggests this to be a prudent course of action.

Denigrating the dog “fancy” is not the purpose of this article. As previously explained, it was my experience as a dog breeder that gave me some instructive insights into the need to balance function and form. In fact, I would like to inspire all of the NASA breeder network with the following quotation from the wonderful world of dogs:

“Each and every breed requires dedication, commitment, objectivity and a heap of love. I believe that to truly understand a breed one has to live with it, sleep with it, work with it, and experience the heartache of it. **Tokenism and superficiality serve only to destroy breeds, not enhance them, protect them, and guarantee a future for them.**”

(Canadian Kennel Club president, Richard Meen)



“Excellent mothering (photo above) combined with muscularity and hardiness (photo below) is the breed ideal that we have to remain focused on.”



It is EVERY breeder's responsibility to "protect the breed standard". It is illogical to assume that NASA can police every registration application. Breeder integrity; rather than the integrity of the registry, is on the line every time a registration application is forwarded.

In my mind, being a NASA Savannah breeder means that you are committed to meat goat industry development by breeding animals that the meat processing sector demands:

"...since when should the show ring ideal be different from the meat market ideal? My concern is that there are those among us who would lead us down the same slippery slope as those who set different ideals among show steers, lambs and hogs to the extent that basic functionality and utility as market animals is lost....if the

top end of a class does not reflect the kind of meat goat that will hang up a carcass that is in demand by the meat sector, then the wrong type is being selected.”
(Dr. Will Getz, Goat Rancher, letter to the editor, Nov. 2006)

Being a NASA breeder also means that we understand and embrace the competitive advantage of goats as a species and focus on performance testing in a browsing or grazing environment:

“...a viable market, low cost of production and efficient reproduction are more critical to the long term success of a meat goat operation than how ‘good’ the kids look. In the environments where meat goats have a competitive advantage (native ranges, brush, etc.) and the lowest cost of production, genetic potential for growth is usually not the first limiting factor for growth. Nutrient availability is typically the first limiting factor for growth. In order to optimize production efficiency, meat goats, especially replacement females, should be selected under the conditions in which they will be expected to produce...Successful beef producers do not select their replacement heifers at the feedlot.” (Dr. Rick Machen, TX A &M, Ext. Livestock Specialist)

Being a NASA breeder means that we do not get hung up on minor traits:

“Horns are ... a minor trait and one which may not have a great deal of economic significance (my note: also pigmentation). It is always wise to place more emphasis on the major points...Do not get hung up on minor traits.”

(Preston Faris, Frank Craddock, Texas Extension Service, “Live Animal Evaluation”, Gathering of Goat Producers 2, Kerrville, Tx, 2001)

In Dr. Pinkerton's words;

“functionality (performance) is simply worth more money than form (looks). It is this priority economic concern that should drive herd management decisions, not rigid adherence to the prose in one's Breed Standards.” (Goat Rancher, February, 2014)

If NASA breeders are able to demonstrate more than a “token” or “superficial” appreciation for the Savannah breed, we will perhaps be able to inspire our whole industry:

“It is not the call, but the flight of the wild goose, that inspires the others to follow.” (Chinese proverb)

Our direction as breeders should be clear:

- 1. Performance test** with Dr. Andries, KYSU Goat Herd Improvement Program.
- 2. Maintain a balance** between reproductive ability, growth and phenotype.
- 3. Maximize the use of pasture forages or browse** in your operations.
- 4. Let the “form” of your animal be influenced by their performance** in the natural environment that you provide rather than the artificial constraints of the show ring.

When you walk through your herd keep these lessons from the beef industry foremost in your mind:

– a cull is a cull no matter what it's papers say and,

– the ugly cow is the best producer—otherwise, you would sell her.

(Ideal Beef Memo, November, 1983, author unknown, as quoted by, Dr. Ken Andries, Goat Rancher, “Breeding Meat Goats: Function over form or not? Part 1”, February, 2014)



“Maximize the usage of pasture and browse in your operation” and “let the form of your Savannahs be influenced by their performance in the natural environment that you provide rather than the artificial constraints of the show ring.”