

The origin and description of southern Africa's indigenous goats

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The tip of South Africa was known to seafarers as “the fairest Cape in all the world”, but also as the “Cape of Storms”. These divergent opinions also apply to the rest of Southern Africa with its widely divergent climatic conditions and ecosystems. These systems vary from subtropical rain forests to spectacular savannah country and endless red Kalahari sand dunes. Although extremely beautiful, the natural environment of South Africa is also a cauldron containing a witches' brew that tests all living organisms to the utmost.

These variable but exacting conditions, however, also created the greatest and most beautiful collection of game animals and indigenous farm animals in the world. Some examples of these game animals are: colossal elephants, rhinoceroses and hippopotami and then graceful the kudu, eland, gemsbok, impala, giraffe, sable antelope and springbok as well as the minute dik-dik and steenbok. However, the domestic animals of South Africa such as Afrikaner cattle, Nguni, Sangas, Damara sheep, Namakwa Afrikaners, Blackhead Persians, Red head Boer goats, White Savanna goats, Kalahari Red goats and Speckled goats also have unique and interesting colours as well as an alert and graceful conformation.

Opperman (1952) described the interaction between animals plants and the environment as follows: “These limiting factors make definite and inexorable demands which in South Africa, with its relatively changeable difficult and exacting conditions such as irregular and mostly low rainfall, create a definite pattern or fundamental standard. An organism which adapts itself to this pattern with difficulty or weakly will suffer distress. In proportion to the degree the vegetation and animal life deviates from the requisite pattern they will endure discomfort and degenerate and in the long run become extinct. Three factors - temperature, humidity and light – rule supreme and in South Africa they are generally speaking stern masters...”

An example of the havoc disease can cause in Southern Africa is the Cattle Plague and Runderpes of 1896. This disease almost wiped out the total cattle and buffalo (*Syncerus caffer*) populations of Transvaal, Natal and Botswana.

Origin

According to Epstein (1937) a number of nomadic black and coloured nations inhabited North Africa hundreds of years ago. These nations could not readily migrate southwards due to a tsetse fly (*Glossina morsitans*) belt stretching along the equator across the whole of Africa.

Epstein (1971) showed by means of a schematic map of tsetse fly distribution in Africa that there is a narrow tsetse-free corridor in the region of the lake district near Lake Victoria and the Ruwenzori mountains. Epstein (1971) continued to explain that the Black Nations along the equator possessed cattle, some of these breeds were Nagana (sleeping sickness carried by the tsetse fly) tolerant. They also possessed goats, a few hairy sheep and dogs. Epstein (1971) said the coloured nations or Khoikhoi possessed domestic animals such as Zebu type cattle, such as the Boran, fat-tailed sheep and dogs. This coloured nation was driven southward by stronger nations armed with bows and arrows and battle axes. This migration started during the fifth century AD in the region of the lake districts. They proceeded through the narrow tsetse-free corridor and then they proceeded along the drier West Coast. From their sheep the fat-tailed Afrikaner sheep were bred and the lateral horned Afrikaner cattle. They later inhabited the dry areas such as Angola, Namibia and Namaqualand.

Bachman (1983) confirmed Epstein's (1971) theory about migration. The Black Nations moved down the hot sweltering East Coast where tick borne diseases are numerous. According to Bachman (1983) the Black Nations possessed a variation of Zebu type cattle breed fairly well adapted to tropical conditions, small hairy thin tailed sheep and small tough hairy dogs. These nations, however, brought with them animals which eventually influenced animal breeding in Africa and around the world. They brought with them a mixture of long-haired and short-haired goats. Those goats consisted of a mixture of short and long-eared or lop-eared goats.

Subsequently, by means of barter or raiding, the Khoikhoi also acquired goats and the Black people acquired fat-tailed sheep. In fact, Barrow (1801) wrote that near the Hartbees river in the Northern Cape, he

encountered some “Namaqua Hottentots who possessed a herd of small handsome goats that were speckled like the leopard.” The South African farmers called these goats “skilderbokke” or speckled goats.

Black farmers, coloured farmers and white farmers soon recognised the fact that these indigenous goats could live on almost every sort of plant material on a farm and could survive and reproduce under extremely unfavourable conditions. Indigenous goats spread rapidly over Southern Africa and were used to produce milk, meat, skins and were also used in numerous trading deals with travelling traders by all farmers.

Development

Especially in the thorn-bush country of the Eastern Cape goat farming flourished. In the Border areas of the Eastern Cape the black and white farmers met and here white farmers acquired shorthaired lop-eared goats. These goats were used to “open up” thorn-bush country for Angora goats, woolled sheep and mutton sheep such as the Dorper and even for cattle farming.

Here farmers started improving their indigenous goats during the twentieth century. The late Mr T.B. Jordaan of *Buffelsfontein*, Somerset East, can be regarded as one of the pioneer breeders of the modern Boer Goat. In the first journal of the S. A. Boer Goat Breeders’ Association published in 1959 he described how breeders of the Eastern Cape developed the Boer Goat. He stated that in 1918 his father, Mr W.G. Jordaan, bought some goats from the farm *Slot*, Somerset East. These goats were short-haired and had white bodies and light-coloured red heads. Farmers claimed goats of this colour were easier to see and easier to manage in thorn-bush country. Simultaneously he bought a big robust dapple-coloured male goat from Mr I.B. van Heerden of *Kaalplaas*, Cradock. From these goats the well-known ‘Buffelsfontein Boer Goat stud’, which influenced the development of the Boer Goat not only in the Eastern Cape, but throughout Southern Africa to a marked extent, was developed,

Van Rensburg (1938) divided Boer Goats into the following types:

- ◆ Ordinary Boer Goats such as roan or ‘skilder’ goats
- ◆ Brindle or Briekwa goats
- ◆ Mouse-eared and short-eared goats
- ◆ White red-headed Boer Goats (one of the most sought-after types)
- ◆ Long-haired or ‘Jas’ (coated) Boer Goats (undesirable type)
- ◆ Long-eared or Polled Boer Goats

According to Van Rensburg all these goats could often be found in the same flock.

On the 4th July 1959 the South African Boer Goat Breeders’ Association was formed at Somerset East with Mr T.B. Jordan as chairman. Breed standards for the Boer Goat were formulated. The ideal colour for the Boer Goats is considered to be a white body with a red head and a blaze. A limited number of red patches are allowed. The skin of the Boer Goat, especially where there is no hair, should be well pigmented. The Boer Goat should have robust well-muscled conformation with strong jaws and a roman nose. It should have relatively short legs and must be well fleshed and must have well-developed hindquarters. Compared to the unimproved goats the Boer Goat must be able to produce kids that can be slaughtered at a relatively young age of five to nine months. At this age some Boer Goat carcasses weigh as much as 25 kg or more.

By laying down breed standards, red-headed Boer Goat breeders have entrenched their position. The red-headed Boer Goat have replaced the indigenous unimproved goats of various colours. However, the unimproved indigenous goats appear to be less susceptible to tick borne diseases such as heartwater.

Scientific selection of Boer Goats

Since 1970 Boer Goat Breeders started participating in the National Mutton Sheep and Goat Performance Testing Scheme. This Scheme is the only known Scheme in the world, which makes provision for the selection of goats for meat production. This Scheme provides for organisational aspects, methods and techniques for the estimation of the production performance of goats in terms of quantity and quality, and include the following:

- Phase A – This phase determines the dam’s mothering characteristics and milk production and growth rate of the kid or kids up to weaning.

- Phase B - The post-weaning growth rate of the kid which can be measured at various ages is determined.
- Phase C - In this phase the efficiency of feed conversion and the growth rate of male kids are determined under controlled and standardised conditions at a central ram testing station.
- Phase D - The post-weaning growth rate of male kids under standardised conditions on the farm under the supervision and direction of the Animal and Dairy Science Research Institute, Irene, is measured.
- Phase E - The qualitative and quantitative carcass components of a sire's progeny is determined.

Performance

The following tables indicate performance figures of Boer Goats collected by the National Mutton Sheep and Goat Performance Testing Scheme.

Table 1 Average 100-day masses of performance tested Boer Goat kids corrected for age and multiple birth and rearing effects

Year	Male kids	Female kids
1970	24.0	21.9
1972	26.3	24.1
1975	23.6	21.7
1979	36.5	29.2
1982	32.3	27.8
1984	23.6	19.0
1986	26.9	23.4
1988	25.3	22.3

Table 2 Boer Goat kids born and kids weaned per 100 females - one mating per year. These ewes were selected because they were thought to be pregnant

Description	Number
Females lambed	98
Singles born	24
Twins born	116
Triplets born	45
Quadruplets born	4
Total number of kids	189
Number of kids per parturition	1.93
Singles weaned	26*
Twins weaned	112
Triplets weaned	42
Quadruplets weaned	4
Total number of kids weaned	184

* Some single kids were born as twins or triplets but weaned as singles

Table 3 Mean masses of female Boer Goats aged 12 months or older in very good condition

	12 Months	18 months	24 months	36 months
Female	45 kg	64 kg	83.3 kg	94.0 kg

Table 4 The initial mass, average daily gain (ADG), estimated kilograms of grazing for one kilogram mass gain and scrotum circumference of Dorper, Blackhead Persian sheep and Boer Goats

Year	Age (days)	Breed	Initial mass kg	ADG g	Kg feed / kg gain	Scrotum circumference
1985/86	400+	Dorper	51.7	55	43.3	32 cm
1985/86	400+	Persian	31.6	65	27.8	34 cm
1985/86	400+	Boer Goat	45.6	43	57.0	28 cm
1085/86	399-	Dorper	35.5	91	23.5	30 cm
1989/90	392	Dorper	46.4	81	24.4	34 cm
1989/90	423	Boer Goat	38.9	92	19.1	29 cm
1989/90	378	Persian	29.1	78	18.9	31 cm

Savanna goats

The white Savanna Goat breed was also developed from the indigenous goats of Southern Africa. Various farmers bred what was known as white Boer Goats for a number of years in Southern Africa. One of the advantages of these white goats was the fact that the white colour is dominant over most other colours. The other reason is that there is a big demand for white goats for slaughter purposes for various reasons. Some people slaughter white goats for religious purposes, other people to celebrate a happening such as the birth of a son. Some people believe white goats have superior carcass qualities. The result is a higher price for white goats than for most other colours.

The best known white Savanna goat stud is the stud of D.S.U. Cilliers and Sons along the Vaal river, close to Douglas in the Northern Cape. This stud was started in 1957 - on rugged harsh bush country where temperatures and rainfall can vary to a marked extent - with mixed ewes and a good big robust white ram by Mr Lubbe Cilliers.

As a result of natural selection, nature's inexorable law - namely survival of the fittest - played a big role in the development of these fertile easy-care, heat and drought resistant animals. These goats have thick pliable skins with short white hair. Apart from reproduction, muscular development, good bone and strong legs and hooves, the goats are selected for totally black well pigmented skins.

As a result of this and natural selection, the skins as well as horns, hooves and all bare skin areas which can be injured by strong ultra-violet rays have totally black pigmentation. In the case of rams and ewes no overdeveloped or overshot lower jaws occur. Despite the relatively high level of inbreeding no inbreeding degeneration have been observed. This is probably because of strict natural selection where all weaker animals are eliminated.

At a meeting held at Olierivier on 21.11.93 it was decided to form a breed society for these goats. Approximately twelve breeders of these white goats were present and it was decided to affiliate with the South African Stud Book Association.

Kalahari red goats

Out of the indigenous goats three colour variants were bred by various breeders. These are : 'Skilder' or Roan goats, 'Appelbokke' or Dapple goats and Red goats. The Red goats have quite a few breeders and they decided approximately in 1990 to start selecting for a breed named by Mr Albie Horn: the Kalahari Red Goat breed. During the year 2000 a National Championship for this goat breed was held at Bloemfontein. Before this they were shown simultaneously with white Savanna goats but in different colour classes.

Kalahari Red breeders claim that this breed is tougher and more robust than red-head Boer goats. At present there are two lines of Kalahari Red goats. One line was developed from red-head Boer Goats. The other line was developed only from "unimproved" indigenous goats.

The breed standards of Kalahari Red Goats and white Savanna Goats are to some extent similar to those of the Boer Goat. The Kalahari Red goats also have a Breed Society recognized by the South African Stud Book Association. Breeders of Kalahari Reds also hold shows and stud sales. There is quite a big demand for this breed as well as Savanna Goats from breeders in African States as well as Australian, American and South American goat breeders.

Conformation

This is a point of a heated debate among goat breeders of different breeds. Some breeders prefer the long-legged straight nosed unimproved conformation of indigenous goats. Other breeders prefer the roman nosed compact, well-muscled, short-legged conformation of the improved Boer Goat. Unimproved goats appear to be more drought and disease resistant than Boer Goats.

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