



THE ORIGIN & DEVELOPMENT *of Savannah goats*

Dr Q Campbell, J L K Kotze en L Cilliers

Added Illustrations and Explanations, Brian Payne,
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(American breed enthusiasts should note the 'Queen's English' spelling of Savannah utilized by my esteemed South African friends in this reprint from the SA Boer Goat magazine; and thus the historic N.A.S.A. spelling.)

The southern point of Africa was known among seafarers as the 'Fairest Cape in the World', but also the 'Cape of Storms'. Similarly the climatic conditions and ecosystems of Southern Africa vary from lovely subtropical rain forests to infinite savannah plains and beautiful Kalahari sand dunes.

However, these wonderful, spectacular ecosystems also contain a bubbling cauldron with a witches' brew of extreme climatic

conditions and tick-borne and other diseases that try all living organisms to the utmost. An example of the destructive effect of diseases in Africa is the Rinderpest of 1896 when great numbers of cattle and Cape buffalo died in areas south of Botswana. These unfavourable conditions and merciless natural selection did, however, result in large numbers of well adapted wonderful game species and a great variety of indigenous stock breeds.

Examples of South African game are: Great, majestic elephants, dangerous buffalo and rhino, graceful giraffe, kudu and eland, attractive sable and tiny dikdikkies and steenbokkies. There are also the unique, well adapted indigenous cattle breeds such as the Afrikaner and the Nguni, sheep breeds such as the spectacular black-headed Persians, Namaqua sheep, Ronderib Afrikaner sheep and Nguni and Damara sheep breeds. Indigenous goat breeds, for example, are the striking red-headed Boer goats, White Savannah goats, dapple goats, small-eared goats and the hardy red and appelbont goats, as well as the Kalahari Reds. (Nguni cattle, photo below)





Damara (above) and Namaqua Afrikaner sheep (below)



During the 5th to 15th century AD indigenous peoples such as the Khoi-Khoi tribes emigrated south along a tsetse-free corridor through the tropical forests of the equator as a result of ethnic violence in the great lakes region (Congo, Uganda, Rwanda and Burundi). Conditions have clearly not changed much in the past 1500 years in the area. These indigenous folks owned Zebu type Sanga cattle, fatty-tail sheep and indigenous ridgeback dogs and trekked south along the drier West coast through Angola, Namibia and Namaqualand. From their hardy indigenous stock breeds the beautiful Afrikaner cattle, short-eared, thin-tailed and hairy sheep, and later the Bonsmara, were developed. From the fatty-tail sheep, the Blinkhaar Afrikaner, the Namaqua Afrikaner and the Damara sheep were developed. From their dogs indigenous breeds such as the Rhodesian ridgeback was bred. (Afrikaner cattle below.)



At the same time various black peoples with Sanga cattle, short-ear dwarsstert, hairy and short-haired sheep, and sometimes long-haired goats, and dogs moved south along the humid, warm, tick-infested East coast. During these migrations all poorly adapted, inferior cattle, goats, sheep and dogs were completely eliminated by natural selection and predators.

The result was that only the best adapted animals survived. The hardy Nguni cattle were bred from the cattle and the short-ear Zulu or Nguni sheep evolved from the sheep. From the goats the refined red-headed Boer goat, the White Savannah goat, Pedi goats, dapple goats, brown indigenous goats, Kalahari Reds and even the short-ear or Muisoor goats were bred.

(Modern Boer, Savannah and Kalahari Red goats were developed from four primary eco-types of indigenous veld goats. Photos below courtesy of the Indigenous Veld Breeders' Society.)



Northern Cape Speckled (Skilder) goat above and Nguni type (Mbuzi) on right.





Kunene type goat (Kaokoland) above and Eastern Cape Xhosa goat to the left.

The best known Savannah stud is the White goats of DSU Cilliers and Son. This flock was started in 1957 along the Vaal River, where temperatures and rainfall vary greatly, with a number of mixed indigenous ewes and a good White ram. From these goats the Cilliers brothers bred the Olierivier Savannah goats through strict selection for fertility and adaptation.

During a meeting of indigenous goat breeders at Olierivier on 21 November 1993 it was resolved to establish a Savannah Goat Breeders' Society and to lay down breed standards for Savannah goats. At a meeting at Olierivier on 19 November 1996 it was resolved to allow Kalahari Red or brown goats, dapple goats and

Muisoor goats as well as the existing white goats into the Savannah Goat Breeders' Society. (Original members of the Savannah Goat Breeders' Society are shown below.)



Front, from left to right: Neville Du Toit, Lubbe Cilliers, Elmarie Human(Secretary), Dr. Quintin Campbell
Back, from left to right: 'Unknown', Merwin Swart, Gert du Toit, Koenie Kotze, Frikkie Vermeulen

Since then the Savannah Goat Breeders' Society has made great strides and in March 1998 a very successful first national championship show with 160 goats was held in Bloemfontein. Sales of Savannah goats are regularly conducted at Olierivier and Prieska. Sales and national shows and now world shows are regularly held for all the different goat breeds.

It was also in 1998 that the Dorper Brochure, a publication of the Dorper Sheep Breeders' Society of South Africa, proudly

advertised a partnership between Kotze and Cilliers and introduced 'Savanna' goats as being "Selected by Nature".



This 7 month old 'Savanna Ram Lamb' EDDIE was used to begin advertising the Savannah breed as being naturally selected through the "survival of the fittest" regime that created the other indigenous South African breeds as described in detail above.

The ideal breed coloration of a "totally white goat with black skin, horns, point of nose, udder, sexual organs and hooves" would correspond with that of the royal Nguni cattle (next photo below). Breed enthusiasts should understand that this is the "ideal" coloration which almost never is found across all animals in a herd. It is far more common to find hairless areas varying from

black to brown in colour (see Savannah Goat, www.indigenusbreeds.co.za).

After 15 years of working with this breed in North America, brown colouration is far more common and often matches the speckles on the ears (i.e. black speckles on the ears will usually mean grey to black pigment under the tail while brown ear/brown nose will mean brown pigmentation under the tail (see photo of 'Savanna ewes 8 months' taken from the same brochure as EDDIE).



Kotzé & Cilliers



Left: "CHIPS"
S.A. Grand Champion Ram 1996



Above: "OMO" Son of CHIPS at 9 months



Left:
CHIPS daughter at 4 months
Cape Provincial Champion-
ships 1997:
Ewe lamb over 40-50 kg



Right:
CHIPS daughter at 9 months
1997 Cape Provincial Champion-
ships: 4th prize ewe lamb over 60 kg

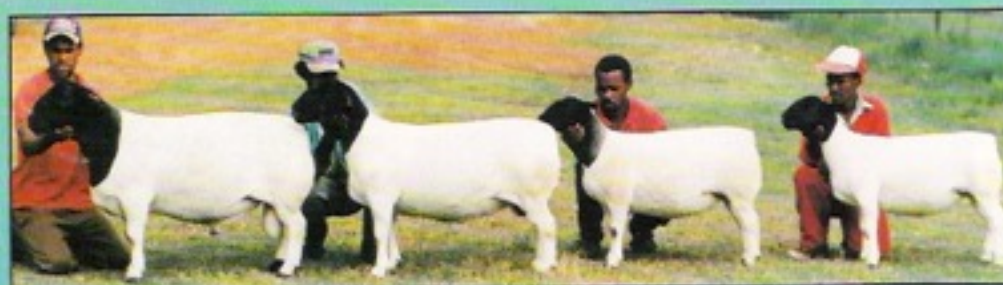


Left: "VASVAT". 2 TOOTH.
Grandson of "Cracker".
Kimberley Grand Champion 1996
1997 Cape Provincial Champion-
ships: 4-tooth ram, Reserve Senior
Champion Ram and Reserve Grand
Champion



Right: "SMOKEY"
4 Tooth.
S.A. Grand Champion 1994

Group Ram,
Ewe and two
lambs.



"VASVAT", Grandson of CRACKER, Daughter of CRACKER, Daughter of CHIPS, Daughter of JABRA

NAVRAE:

Mnr. Lubbe Cilliers – (053) 298 2932
Mnr. Koenie Kotzé – (053) 298 1156
Kantoor – (053) 298 2544

Mnr. Koos Crause – (053) 298 1172
Mnr. Neville Du Toit – (053) 298 1179

ADRES:

Posbus 106
DOUGLAS
8730

Douglas



"DANIEL", 2 TOOTH
Son of 007, Grand Champion Kimberley Show 1996



"EDDIE", Savanna Ram lamb (7 months)



"BATTERY", 2 TOOTH
White Dorper Ram, Used in Stud.
Cape Provincial Championships: 1997
4-tooth Reserve Champion Ram and
Reserve Senior Champion Ram



Daughter of 007 (6 months)



Savanna ewes (8 months)

DORPERS:

S.A. Championships 1996:
S.A. Champion 4 tooth ram,
S.A. Senior and Grand Champion Dorper ram.
Reserve Champion Group of 3 Ram lambs.
Reserve Champion Group Ram, Ewe and 2 lambs

RAMS IN USE:

Cracker – S.A. Champion 1992
Smokey – S.A. Champion 1994
Chips – S.A. Champion 1996,
S.A. Record price 1995 R150 000.
Jabra – S.A. Record price Ram 1994
Vasvat – A muscular ram with good build and
hair cover.

WHITE DORPERS:

S.A. Championships 1996:
Reserve Champion 4 tooth ram

RAMS IN USE:

Roker – Coen De Beer
Battery – Abrie Maritz

BOERGOATS:

RAMS IN USE:

007 – S.A. Record price R75 000
Pop Eye – 1 of only 2 AI rams in the country
Glipsie – Half brother of 007
Daniel – Son of 007

SAVANNA GOATS:

Selected by nature. Come and see for yourself.



The photos above of Keri-Rose 3014 and Keri-Rose 630 demonstrate the “ideal” in terms of pigmentation while the following photo illustrates a more commonly pigmented animal.



It is important to note however, that an animal is considered a cull only when the pigmentation is too light (pink) or incomplete. The following two photos of Keri-Rose 662 (top) and her daughter, Keri-Rose 909, are instructive. Both does are completely pigmented but KRI 909 more closely represents the “ideal” of black pigmented skin under the tail as well as her udder. Most breeders would agree, when comparing this mother and daughter pair, that the udder capacity and attachment of KRI 909 is the most important improvement in the younger generation with ideal pigmentation being a “fancy point”. Sire selection is critical for



improvement and all breeders are encouraged to follow the central thesis of the breed standard, a functionally efficient breed developed to maximize economic performance.

In this regard, it is instructive to review the head type of the young buck, Eddie, in the Cilliers/Kotze advertisement reprinted above. Compare this “selected by nature” head piece of the mid nineties and then compare it to the illustrations of two modern Kotze bucks which follow below:





Breed enthusiasts who are truly committed to a breed standard that speaks eloquently about “a strong, virile, functionally efficient goat” should deliberate on these changes. What happened to Dr. Campbell’s paramount insistence that “breeders should select for productivity and not for fancy points” and his warning that, selection for traits with little or no economic value in order to obtain uniformity, “may adversely influence adaptability”?

“The adaptability of a sheep or a goat can be determined to a large extent by means of the following parameters: health, mortality, reproduction and mass gain...performance testing in actual fact also measures adaptability...Commercial and stud breeders should keep records of the productive traits of their ewes and should select for productivity and not for fancy

points..should stud breeders persist in paying a lot of attention to split scrotums and the amount of red hair and spots which may be allowed...very little genetic improvement for economically important traits will be made.....In the case of the unimproved breeds animals are selected according to nature's ruthless law, namely that the specie is more important than the individual and only the strongest and fittest may survive and reproduce. **As soon as breeders start to farm with a breed, breed standards are laid down and animals are selected for traits which mostly have no or very little economic value in order to obtain uniformity. Traits such as colour, shape of the head and horns, length of leg, straight back and type are paid a lot of attention to in the selection programme of the breeder. Not only do a number of these traits have very little economic value but some of these traits can also adversely influence the adaptability of goats."**

(Dr. Q.P. Campbell, "Performance Testing and Adaptability of Boer Goats")

Because of their adaptability the Savannah goats embody the following advantages:

- Greater net profit due to low input costs.
- Low mortality in resistance to disease.
- Very good consumers of roughage; they use pasture that other breeds cannot.
- Good mothering traits; produce more weaned kids per given ewe biomass.
- Ewes can kid in the veld and ewes and kids do not have to be penned when the kids are young.
- Savannah goats can thus be profitably farmed with less labour and supervision.

■ Some resistance to gangrene of the uterus and enzootic abortion.

Mass for rams and ewes:

Age:	Rams:	Ewes:
100 days	35 kg. (77 lbs.)	30 kg. (66 lbs.)
12 months	70 kg. (154)	45 kg. (99)
24 months	85 kg. (187)	50 kg. (110)
36 months	105 kg. (231)	65 kg. (143)

BREED STANDARD OF THE SA SAVANNAH

The following traits that contribute to the economic value of the Savannah White goat breed must be meticulously attended to in evaluating and selecting commercial as well as stud breeding animals of the breed.

IN GENERAL

The Savannah White goat should be a strong, virile, functionally efficient goat with a lively but not wild carriage.

The ewes must be of medium size but should appear refined and feminine. Ewes with lambs at foot should have good mothering abilities and should aggressively defend their lambs against dogs and other predators.

Rams must be masculine, proud, robust and well muscled. The following photos of Joe Scholtz's (Patrysfontein, Griekwastad) Savannah buck illustrate this point very well. This buck sold for a record SA price of 21000R for a performance tested ram.



The Savannah White goat was developed under very unfavourable environmental conditions and must be able to easily endure heat, intense sunshine, cold and rain. The breed moves easily and can if necessary travel long distances in search of fodder and water.



The photos above and below were taken on the veld near Douglas, SA near the home of breed founder, Lubbe Cilliers.



The Savannah White goat should also be able to utilize a wide range of plants such as trees, bush, shrubs, grass and scrub that are hard and even unpalatable to other animals. (The next photo below shows the Keri-Rose Savannah herd browsing in southern Alberta, Canada).

The Savannah goat must have a long breeding season and should be sexually active and able to breed any time of the year.

CHARACTERISTIC TRAITS OF THE BREED:

- Lively appearance.
- Symmetrical conformation with legs and body not too short or too long.
- Thick, mobile, dark pigmented, loose skin.

- Short, kemp white hair. During the winter months the goats develop extra fluffy cashmere hair for protection.
- The goats have strong jaws and strong, long-lasting well-developed teeth.
- Good mothering traits and high fertility.
- Long, productive life.



Bi-pedal flexibility is an important functional trait for meat goat breeds in a brush and browse environment. This trait allows the harvesting of forage to a greater height and opens more ground underneath for sunlight to penetrate and grass to grow for cattle grazing.

HEAD:

The Savannah goat has a fairly long, **slightly curved nose section** and the head has the shape of that of a big-mouth Yellow-fish. The head and nose must be fairly broad and not sharp. The mouth must be reasonably wide with well muscled jaws.



(Breeders should remember the previous photos of how the Savannah head type has changed over time rather than remaining true to the original description utilized by the breed founders who found their inspiration from the local game fish and animals that they were familiar with. In an interview with Dr. Campbell, he suggested to me that the Savannah standard was created by going into the veld and describing the “survivors”).





The upper and lower lips must be well muscled and mobile like that of a Kudu.

The teeth of young as well as mature goats must bite solidly and correctly on the dental pads of the upper jaws. No jaw or mouth faults will be tolerated except for eight-tooth olds and older may show a 6 mm protrusion.



The eyes must be bright and surrounded by black pigmented eyelids; skin must be protected by well developed eyebrow ridges.

The ears must be fairly big, of oval shape and hang down next to the head. The ears must be well pigmented and mobile in order to protect the goat against midges, ticks, gadflies and other insect pests.

The horns of the white Savannah goat are dark black and grow backwards from the crown of the head. The horns should not grow wild or be too long. Rams have stronger, heavier horns than ewes. At the base there should be reasonable width between the horns.

Both ewes and rams must be able to drop their horns and strike a hostile stance when danger threatens them or their kids.

NECK, FOREQUARTER, LEGS AND HOOVES:

The neck is well muscled and reasonably long so that the goat can easily reach as high as possible to browse on branches and pods of various types of thorn trees.

The forequarter is well muscled and of medium width. There will be strong discrimination against a narrow or very wide forequarter. The front legs are well placed and straight. The cannon bone of both the front and hind legs should be short and strong. The pasterns of the front and hind legs must be strong and springy and must be slightly sloping. Straight or weak pasterns will be strongly discriminated.

Hooves of both front and hind legs must be strong, hard, black and reasonably big. The two sections of each hoof must be close together.

The hooves should not be overgrown and the hooves of Savannah goats must not crack or easily fester or become sore.

The scapulas or shoulder blades must be strongly attached to the forequarter and withers.

The processes spinosus and withers should be somewhat higher than the back and rump. In older rams, medium sized skin folds occur particularly on the forequarter.

BACK AND CENTRE PIECE:

The centre piece should be reasonably long and deep on the goat and must possess enough capacity to eat sufficient roughage and to convert it into meat and energy. The back and eye muscles (longissimus dorsi) must be strong and wide and not straight but

should also not be weak. The centre piece of older animals must not be cylindrical or lack depth.

HINDQUARTERS AND HIND LEGS:

The hindquarters should be wide and the hind legs must be well apart and straight. The rump must show a reasonable slope just like that of the gemsbok (Oryx Gazella). The same rump structure as well as udder pigmentation is evident in both the breed



examples following (top DSU Cilliers, bottom Keri-Rose import.)



Hindquarters must be well muscled and well fleshed.

The hocks must be strong and muscular and the tendons of the hocks must be prominent and clearly visible. The hocks should not turn in or out and the goat must be able to stand easily on its hind legs.

The tail of the Savannah White goat must be straight up, be well covered with hair and should be very mobile. The bare skin of the tail should also have black pigmentation.

COLOUR PIGMENTATION AND HAIR:

The Savannah goat is totally white. A limited amount of black and red hair is acceptable, but red or black hair must be phased out. Pigmentation in rams and ewes must be dark grey to black. Light spots may not appear on Elite ewes and rams. Any shade of pink is a cull defect. (Keri-Rose Does next page illustrating the above)





The Savannah is a totally white goat with a black skin, horns, point of nose, udder, sexual organs and hooves. This colouring corresponds with that of the so-called royal Nguni cattle.

The coat consists of short white kemp hair. During the winter months the goats often develop extra cashmere for insulation against low winter temperatures.

SEXUAL ORGANS:

Normal, well-developed genitalia are required. Rams must have two well developed testicles in one short scrotum. The scrotum must have a circumference of at least 26 cm (10 1/4 inches); if there is a split, 2 cm will be the maximum permissible length (about 3/4 inch). Twisted testes are unacceptable. Testes should appear to be equal in size.(Photo, Keri-Rose 553)


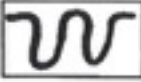




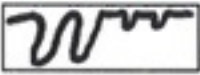




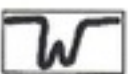


TEATS:

Rams: One teat on either side of the scrotum is ideal; two on a side are acceptable until 26 January, 2011.

Ewes: Two functional teats are ideal. Double teats are not acceptable; one teat with two orifices is acceptable, but must be phased out. Teats with a small blind teat are acceptable. Refer to the included sketches of the SA Boer goat. The maximum teats

TEATS - SPENE

Speen Tipes - Teat Types		Kategorië / Categories
1.		Ideal / Ideaal
2.		Acceptable / Aanvaarbaar
3.		Acceptable / Aanvaarbaar
4.		Acceptable / Aanvaarbaar
5.		Acceptable / Aanvaarbaar
6.		Acceptable / Aanvaarbaar
Speen Tipes - Teat Types		Kategorië / Categories
7.		Acceptable only for commercial goats. Aanvaarbaar slegs vir kudde bokke.
8.		Acceptable for stud & commercial goats. Aanvaarbaar vir stoet en kudde bokke.
Speen Tipes - Teat Types		Kategorië / Categories
9.		9-12 Kudde, indien funksioneel doeltreffend
10.		Commercial, if functional
11.		
12.		

on a side are 3; 2 functional and one small and blind, OR 1 functional and 2 small and blind. ALL TEATS MUST BE SEPARATE FROM ONE ANOTHER. (According to the given sketches of the SA boer goat, sketches 1 to 6 are acceptable, but sketch 1 is the ideal to be pursued).

FERTILITY AND GROWTH:

The breed is characterized by its fertility, good mothering traits and pre and post weaning growth rate. 22% twins occur under extensive conditions and ewes must take good care of them. Ewes, particularly stud ewes, must be able to kid and take care of their kids in the veld without help and supervision.

Kids being too big at birth will be strongly penalized.

CULL DEFECTS:

- Faulty mouths
- Faulty legs and pasterns
- Faulty genitalia and udders
- Any deviation from the normal conformation that will impair the functional effectiveness of the White goat.
- Incomplete or too light skin pigmentation

IN CONCLUSION:

Southern Africa with its variable climatic conditions and extensive pasture regions that range from Kalahari sand to thick bush veld areas, is the cradle of the greatest variety of beautiful antelope and indigenous species in the world. We think of kudu, eland, oryx, sable, springbok and many others. As far as domestic animals are concerned, wonderful cattle breeds such as the Afrikaner and the Nguni originated here. The Savannah must also

be seen as a graceful, indigenous product of this sunny but harsh country with its extreme conditions. Natural selection created the Savannah. (This heritage is ours to protect!..both photos, Cilliers.)



