

## Studies in Native Animal Husbandry: (7) *Makalanga Cattle—A Representative Described* (¹).

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### INTRODUCTION.

JUST as the Pagan cattle of Nigeria represent the dwarf type of West Africa, so is the Makalanga the dwarf among South African cattle.

The most complete account of the Makalanga is that of Nobbs (1927), but as he does not give either a detailed description of the type nor illustrate his paper with photographs; these points will receive attention in this note.

Nobbs gives the limits of distribution approximately as follows: *North*, the Zambezi Valley; *east*, the Southern Rhodesia-Mozambique border; *south*, "the edge of the Limpopo Valley and to the Devuli River"; and *west*, by the Shangani River. He adds that Makalanga cattle may be found beyond these boundaries. In the Union of South Africa a few specimens of the type are to be found scattered throughout the Northern Transvaal, their small size, when compared with the larger cattle of Bechuana origin, being most striking.

Nobbs correctly describes the conformation as variable, good examples being sturdy while poor specimens are undersized and weedy. Strangely enough, he makes no reference to some features characteristic of most native types, viz.: presence of small hump, well developed dewlap, and a navel fold. He mentions, however, other points, e.g. goose rump, long tail, etc.

### DESCRIPTION OF MAKALANCA COW, D.O.B. 4181

(See Figs. 1 and 2.)

This cow was the calf of a Makalanga cow which was introduced in-calf from Southern Rhodesia to Northern Transvaal about 1920 by Commandant Goosen.

In May, 1930, she was purchased by Mr. S. S. Viviers from native Isak Matada on behalf of the Director of Veterinary Services and arrived at Onderstepoort on 4.6.30. The purchase price was 25s.

(¹) See *Farmer's Weekly*, 4/5/32, p. 451. Our Native Breeds.

On 13.6.30 she was described by one of us (J.H.R.B.) as follows:—

#### GENERAL APPEARANCE.

Diminutive in size, but in general conformation well proportioned. The most striking features were:—

- (a) The relatively long head, especially from the eyes downwards.
- (b) The relatively large and heavy horns.
- (c) The fineness of the bones of the limbs.
- (d) The presence of a small hump.
- (e) The low set and narrow pin bones.
- (f) The roofiness of the rump.

#### DETAILED DESCRIPTION.

##### 1. Head.

Lean and dry, long and relatively narrow, especially from eyes downwards. Greatest width is found between the eyes; this width is well sustained upwards over the forehead on to a broad, slightly concave, poll. From the eyes downwards the face tapers evenly into a rather narrow muzzle. In profile the nose is uniformly convex from just below the eyes to the muzzle. The depth of head through the angle of the jaws is rather small; through the corner incisors, ditto, and reminds one of a duck's beak.

- (a) *Forehead*: Slightly dished between eyes, sufficiently broad.
- (b) *Eyes*: Open, of fair size. The arches, compared to the Afrikaner, are light.
- (c) *Face*: Long and convex in profile.
- (d) *Muzzle*: Shallow and rather narrow.

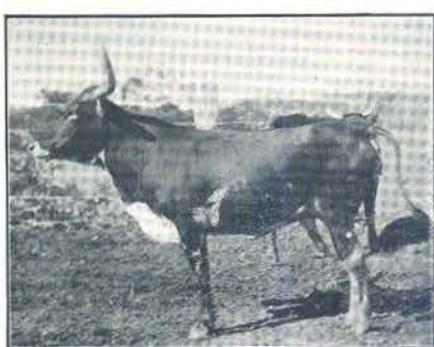


Figure 1.

Fig. 1. Makalanga cow 4181. Photo by S. Viviers, May, 1930.  
Fig. 2. Makalanga cow 4181.



Figure 2.

(e) *Horns*: In proportion to the size of the animal, very long, large and heavy. They come away from the broad, slightly concave poll in an outward, backward and upward direction. The angle which they make with the horizontal is approximately  $30^{\circ}$ . About 10 in. from their base the horns gradually change their direction to end outwards, upwards and slightly forwards. Total length of horns about 20 in. Base, oval in cross section with an antero-posterior diameter of about  $2\frac{1}{2}$  in. and a latero-medial diameter of about  $3\frac{1}{2}$  in. Half way up, the cross section becomes circular and the horns taper gradually into sharp points. Ground colour of horns is greyish-white with dark tips.

(f) *Ears*: Medium in size, fine quality skin and hair, placed well below and about 4 inches behind base of horns, and carried horizontally.

(g) *Cheeks and Lower Jaws*: Lean and dry.

## 2. Neck.

Medium in length, good depth, flat, sufficiently covered sides, fits well on to shoulders.

(a) *Upper border*: Horizontal from poll to where it passes on to the hump.

(b) *Hump*: Small, well attached, placed well in front of withers, typically Afrikaner in type.

(c) *Dewlap*: On the light side, devoid of filling, starts 3 in. behind the chin as a single fold of skin, about 2 in. deep, becomes well tucked-up in the region of the throat latch and from there starts again and gradually becomes deeper to about  $\frac{2}{3}$  of the way down the neck, where it is about 6-7 in. deep. From here it again becomes smaller and ends well back between the front limbs.

## 3. WITHERS.

Fit in very nicely with the top line of the body; of sufficient width.

## 4. FRONT LIMBS.

Well placed.

(a) *Shoulders*: Of good depth and width, very well attached to the body and helping to form neat withers.

(b) *Arm*: Fair length, good musculature.

(c) *Fore arm*: Comparatively long, fair musculature, tapers gradually to the knee.

(d) *Knees*: On the small side, rather round, dry and well placed between fore-arms and cannons.

(e) *Cannons*: Comparatively short, fine of bone, dry of tendon, of fair antero-posterior width.

(f) *Fetlocks*: Good size, dry and well placed.

(g) *Pasterns*: Straight, short, form an angle of about  $50^{\circ}$  with the horizontal.

(h) *Feet*: Show a toe angle of approximately  $40^{\circ}$ . Toes rather long, heels rather low, compared with the Afrikaner. Interdigital space rather wide.

### 5. BODY.

(a) *Topline*: Excellent, showing neat withers, a broad, straight, strong and well muscled back and exceptionally good loins, wide, flat, well muscled and passing over evenly into the rump.

(b) *Thorax*: Shows good depth of front ribs with a rather inconspicuous brisket. Hind ribs short, could be better arched and longer.

(c) *Abdomen*: Tucked up with cut-up hind flanks. (N.B.—The animal has not yet become acclimatised, feeds badly and has been scouring.)

(d) *Under line*: Irregular, showing a fold of skin 2 in. to 4 in. deep, running backwards from the umbilicus to the udder.



Fig. 3. Makalanga cow—a good type.

### 6. HINDQUARTERS.

(a) *Rump*: Of fair length with the sacrum running back horizontally in line with the loins, and ending in a rather heavy and high tail root. On either side of the sacrum the rump falls away badly to very low set on thirls and pin bones.

(b) *Hook bones*: Show good width, fairly prominent, level with the loins and the sacrum.

(c) *Thirls*: Rather narrow and low placed.

(d) *Pin bones*: Very narrow and set on low. They are quite 6 in. below the hook bones.

(e) *Tail*: Begins from a coarse high set on tail root, is rather heavy and ends well below the hocks in a fair switch.

7. HIND LIMBS.

(a) *Thighs*: From the side shows fair length dorsally, but becomes very narrow over the gaskins. From behind, the twist is badly cut up and the thighs show lack of thickness throughout. Gaskins long and narrow.

(b) *Hocks*: Ankylosed, due to a bilateral chronic deforming arthritis.

(c) *Cannons, etc.*: As in front limb.

8. MILK SYSTEM.

*Udder*: (Cow dry)—placed far forward on belly, shows very little udder tissue, small non-pigmented teats and practically no milk veins.

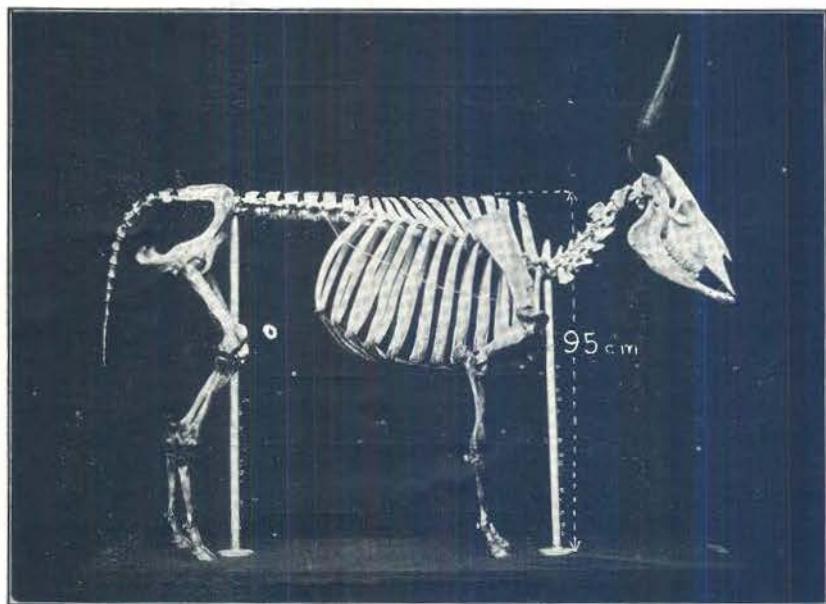


Fig. 4. Skeleton of cow 4181.

9. COLOUR.

Body colour a dark fawn, practically black; a little less dark over the upper ribs, rump and shoulders. Poll reddish brown and all along the vertebral line from the withers to the switch of the tail a red-brown band. Round the muzzle a greyish yellow band, muzzle black; dewlap, belly and switch of tail speckled grey; inner thighs yellow fawn; cannons dark fawn; hoofs black.

10. *Condition*: Poor.

11. *Weight*: 350 lb.

12. *Measurements*: See below.

Type: MAKALANGA.  
 LOCALITY: ONDERSTEPOORT.  
*(Cow from Northern Transvaal.)*

D.O.B. No. & Sex.	Date of Measur- ing (2)	Length of body, <i>(T. ischii</i> point of shoulder).	Width at withers.	Height at hockbones.	Width of cheest.	Depth of cheest.	Width between hockbones.	Width between thirds <i>(Trochanter</i> <i>I. femur)</i> .	Width between pinbones <i>(Tuber-</i> <i>ischii)</i> .	Length of head.	Length of eyes.	Length of coup.	Greatest height. <i>(Tuber-</i> <i>sacrale)</i> .	Remarks	
Cow 4181	10½ years	13/6/30	108	95	102	49	28	37	27·5	9·5	132·5	42	15	36	Lame, on account of ankylosed hocks,

(<sup>1</sup>) 3 measurements were taken and the average accepted. Measurements given in cm. For description of body measurements see Du Toit and Bisschop (1929).

### CONCLUSIONS.

It must be admitted that Cow 4181 was a poor example of the Makalanga, particularly since she was affected with chronic arthritis of both hocks. A good specimen is shown in Fig. 3, this being a black cow seen on Mr. Goosen's farm near Messina, at Easter, 1930. Such conformation would be excellent as foundation stock for imported bulls, or better still, for breeding up the type.

Cow 4181 was killed on 12.9.30, her skeleton being in the Osteological Museum of this Institution (see Fig. 4).

### ACKNOWLEDGMENT.

We desire to express our indebtedness to Mr. S. S. Viviers, formerly Stock Inspector at Messina, not only for Fig. 1, but also for procuring the beast described above.

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### REFERENCE.

- DU TOIT, P. J., AND BISSCHOP, J. H. R. (1929). The Breeding of Cattle on Phosphorus Deficient Veld. *11th Ann. Rpt. Dir. Vet. Serv., Pretoria*, p. 1110.
- NOBBS, E. (1927). The native cattle of Southern Rhodesia. *South African Jl. Sc.*, Vol. 24, pp. 328-342.