

Group IV

KURI

Origin

Kuri, or as they are sometimes called, Lake Chad or Buduma, cattle are maintained by the closely related Kuri and Buduma tribes which are thought to be descended from the Kanembou tribe which migrated to the Kanem district from Libya and the French Sudan in historical times. A number of suggestions (Curson and Thornton, 1936; Ross, 1944; Koné, 1948; Gates, 1952) have been put forward to account for the derivation of these cattle, which are the largest in West Africa, are distinguished by gigantic bulbous horns, and bear little resemblance to any other cattle type in Nigeria or French West Africa.

Conditions in the native home of the breed

Location, topography and soils

The area in which the Kuri cattle are found is between approximately 13° and 16° north latitude and 13° and 17° east longitude, and embraces the islands and shores of Lake Chad, both in Bornu Province, Nigeria, and in Chad territory and N'Guigmi Province of the Colonie du Niger. The type also extends into the Sudan Savannah zone to the west and south of Lake Chad and to the borders of the Sahelian zone to its northwest.

With the exception of that part which extends into the Sudan Savannah zone, which is undulating with fixed sand dunes; the area is flat with extensive marshes near the shores of Lake Chad. The elevation above sea level is approximately 1,000 feet.

Climate

The area occupied by the Kuri cattle has the Sudan zone climate with a clearly defined wet season extending over the five months from May to September while the remainder of the year is very dry. During the period October to February the days are hot and dry and temperatures of over 110° F. are often recorded. The diurnal range in both

temperature and humidity is, however, considerable and the nights can be cold and sometimes foggy. During the rainy months storms move over the area from the southwest. At this time of year, although temperatures are lower than in the dry season, a feeling of oppression is induced by the increased humidity and frequently overcast sky.

Climatological data for Bornu Province, Nigeria, and for Fort Lamy in Chad territory are given in Table 59.

TABLE 59. - CLIMATOLOGICAL DATA FOR THE LAKE CHAD AREA

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
<i>Bornu Province, Nigeria</i>													
Mean temperature, °C.	23.9	23.9	26.7	29.4	32.2	29.4	26.7	26.7	26.7	26.7	23.9	21.1	26.4
Humidity, at 15.00 hrs., %	20	20	15	20	30	40	60	70	50	30	20	20	32.9
Rainfall, mm. ...	nil	nil	nil	nil	38.1	63.5	177.8	215.9	101.6	12.7	nil	nil	609.6
<i>Fort Lamy, Lake Chad Territory</i>													
Mean temperature, °C.	23.8	25.6	29.5	32.5	32.3	30.9	28.2	26.5	27.7	29.4	27.2	24.8	28.2
Humidity, % ...	33.7	30.9	27.1	32.8	43.5	49.5	62.3	70.6	66.6	53.5	41.0	39.5	45.9
Rainfall, mm. ...	nil	nil	nil	8.2	38.1	64.4	169.8	243.5	86.8	29.9	1.3	nil	642.0

SOURCE: Bornu Province: Reed, R. L., *Personal Communication*.
Fort Lamy: Troquereau, *Personal Communication*.

Vegetation

The vegetation of the area is a mixture of Sudan and Sahel zone vegetation. Around the shores of the lake, in the marshy area, tall reed grasses of the papyrus type grow profusely. The vegetation of the Nigerian shores of Lake Chad has been described by Golding and Gwynne (1939). Koné (1948) describes the vegetation from the French side. Along the banks of rivers and rivulets which drain into Lake Chad there is a dense growth of *Commiphora africana*, *Acacia raddiana*, *Balanites aegyptiaca*, *Acacia senegal*, *Cadaba farinosa* and *Calotropis procera*. Of the grasses, *Cenchrus echinatus* and *Andropogon* spp. are found. Elsewhere in the area other grasses occur, including *Panicum exile*, *Panicum elatum*, *Digitaria exilis*, *Echinochloa colona*, *Sporobolus* sp., *Pennisetum setosum*, *P. parviflorum*, *P. mollissimum*, *Chloris prieri*, *Dactyloctenium aegyptiacum*, *Digitaria gayana*, *Aristida mutabilis*, *Eragrostis tremula* and *Oryza brachyacantha*.

Management practices

Most of the Kuri cattle are owned by the Kuri and Buduma tribesmen who live on the islands and marshy shores of Lake Chad. The cattle are usually seen in herds of 30 to 35 cows with a bull, and subsist mainly on the lakeside grasses. Several hours are spent each day in the waters of the lake which have a high potassium chloride content, either grazing or swimming between the islands and the shore. These cattle do not appear to thrive as well when they are taken away from the vicinity of the lake. The cattle are utilized mainly for milk and beef production and, although some are used as pack animals, they are not generally considered to be suitable for draft purposes.

Physical characteristics of the breed

The Kuri (Figures 46, 47 and 48) is a tall animal, distinguished by its enormous horns and by its absence of hump. The head is long, with a straight profile and a wide forehead, to which the prominence of the orbital arches lends a degree of concavity. The ears are of medium size and are carried horizontally. The horns of the Kuri are, perhaps, its most remarkable feature. Typically they are long (70 to 130 cm.), circular in cross section, and about 35 to 55 cm. in circumference at the base. The direction of growth is that of a high lyre shape or wide crescent. Sometimes, however, the horns may be short — about 20 to 30 cm. — and as much as 24 inches in circumference at the base. These horns may have a surface which is roughened and ridged and a cross section which is flattened so that their appearance is that of "enormous ears." The coloration of the horns is generally light with the exception of the tips which are black. The horns, although their appearance is massive and lends an aspect of great weight to the head, are not heavy as their structure is cellular and porous. Loose horns can be seen in Kuri herds and polled animals are not uncommon.

The neck is short and flat. The body is long and the topline is straight, rising slightly from the withers, which, although thick, show no evidence of a hump, to the hindquarters which are of moderate slope. The tips of the dorsal vertebrae show a fused bifid structure. The limbs are long and the hoofs are large and open.

The most common coat coloration is white but gray shading over the shoulders and the extremities, red, and red and white are sometimes seen.

In areas further from Lake Chad Kuri herds show evidence of a degree of zebu ancestry and small cervico-thoracic humps may be

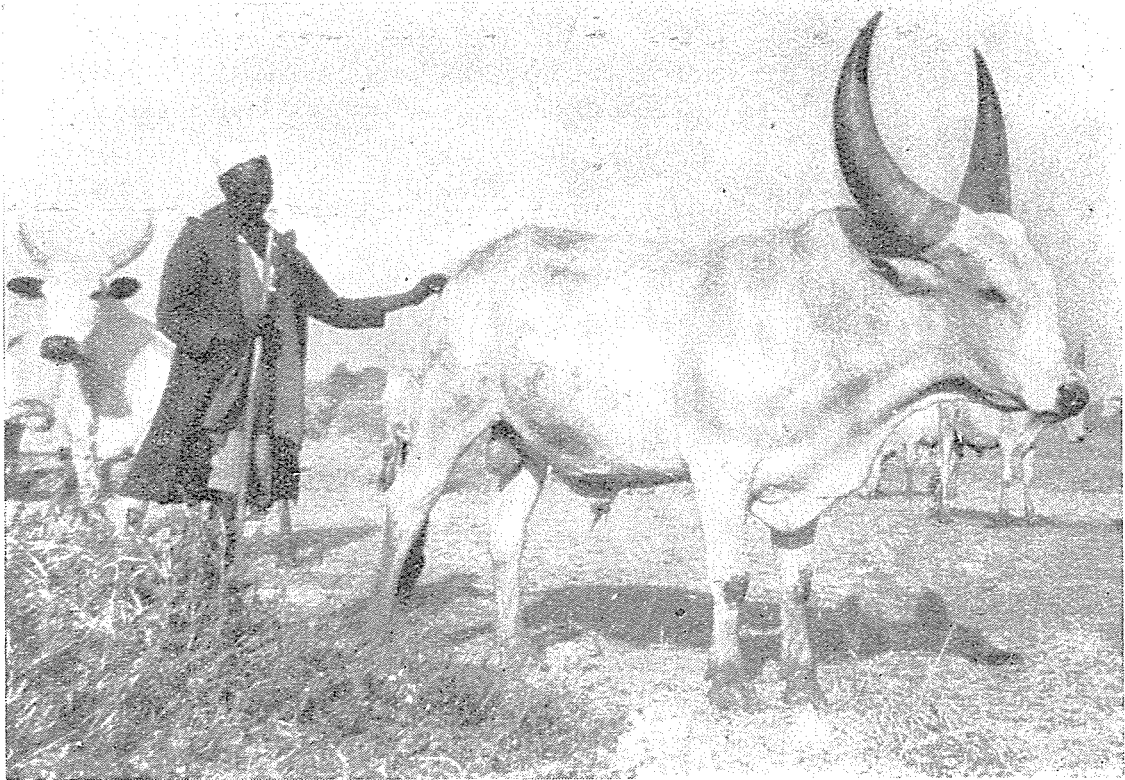
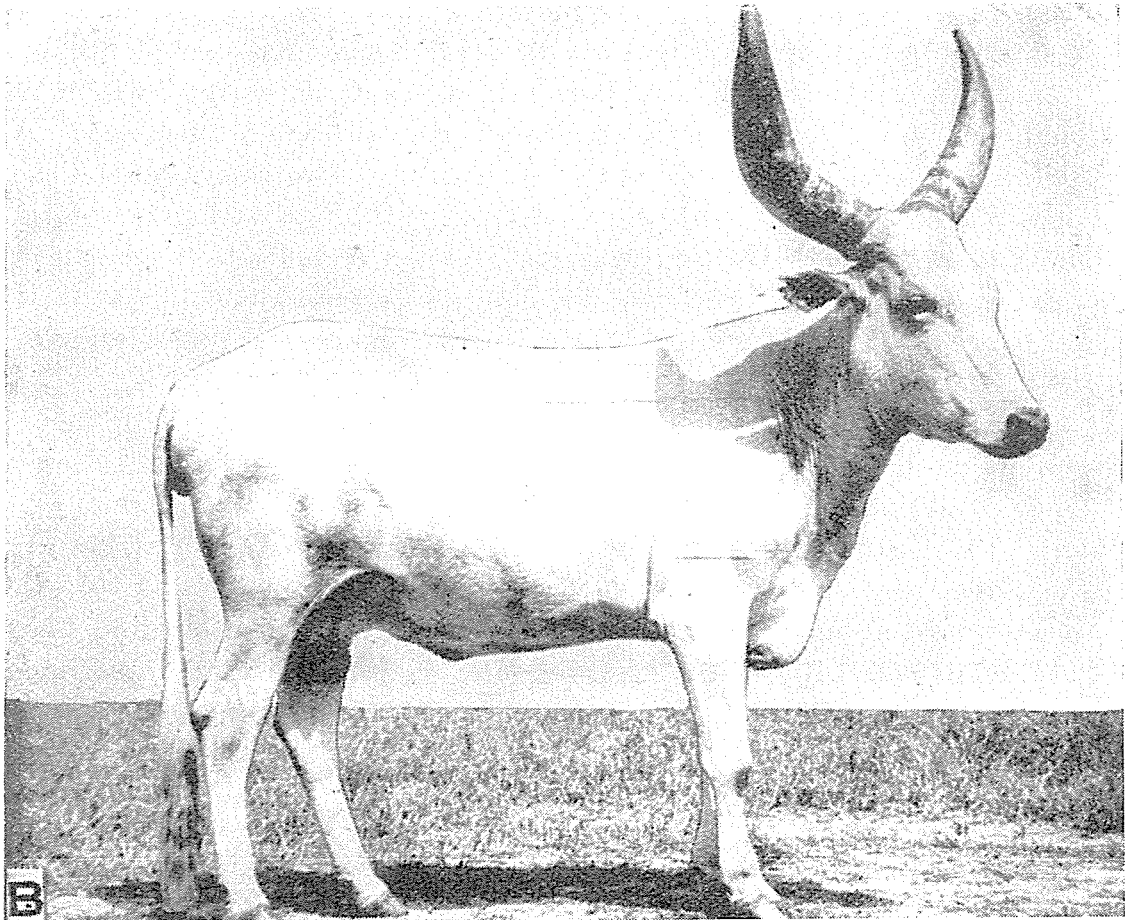


FIGURE 46. *Kuri bull.*

FIGURE 47. *Kuri cow.*

Courtesy of G. M. Gates



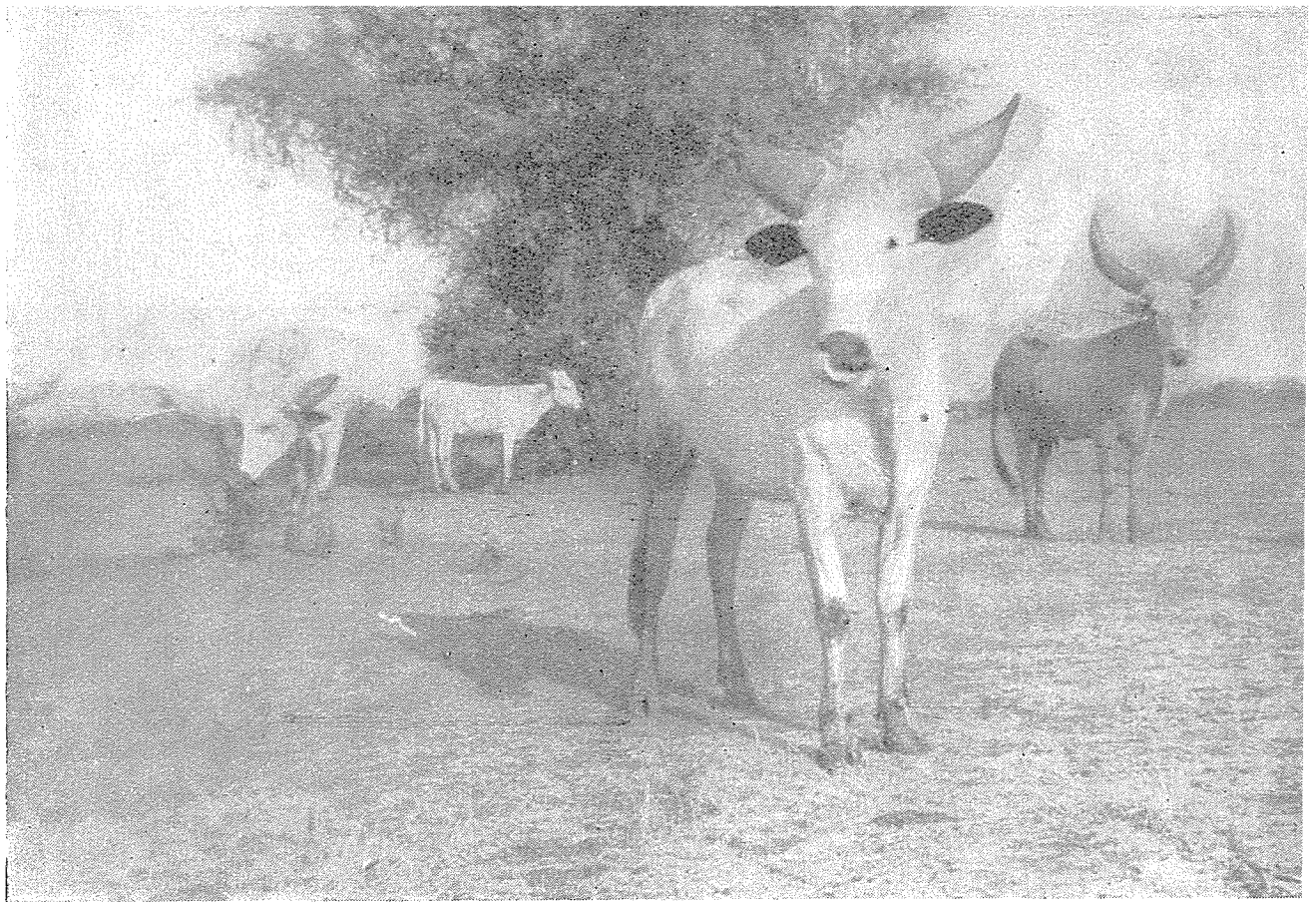


FIGURE 48. *Kuri cattle near Lake Chad.*

Courtesy of G. M. Gates

seen as well as an increased proportion of broken and pied coat colors (Doutressoulle, 1947; Reed, R.L., *Personal Communication*; Troquereau, *Personal Communication*).

The average birthweight of male calves has been 55 lb. and that of females, 50 lb. (Reed, R. L., *Personal Communication*).

Average measurements of Kuri cattle at the Government Cattle Farm, Maiduguri, Bornu Province, Nigeria and in French West Africa are given in Tables 60 and 61.

TABLE 60. - AVERAGE MEASUREMENTS OF KURI CATTLE AT MAIDUGURI

	Male			Female		
	1 year	2 years	mature	1 year	2 years	mature
Weight, lb.	290	500	1 100	280	460	800
Length from shoulder point to pinbone, in.	37	48	60	40	46	57
Height at withers, in.	42	46	60	41	46	55
Depth of chest, in.	16	19	27	17	20	25
Width of hips, in.	10	13	19	11	13	18
Heart girth, in.	46	52	76	46	50	68

SOURCE: Reed, R., L. *Personal Communication*.

TABLE 61. - AVERAGE MEASUREMENTS OF KURI CATTLE
IN FRENCH WEST AFRICA

	Male	Female	Ox
Weight, kg.	650.0	400.0	550.0
Length from shoulder point to pinbone, cm.	122.3	116.3	124.0
Height at withers, cm.	146.0	136.0	151.0
Depth of chest, cm.	68.9	66.5	72.8
Width of hips, cm.	49.2	46.0	50.2
Heart girth, cm.	195.0	184.0	211.0

SOURCE: Malbrant *et al.*, 1947.

Functional characteristics of the breed

The type is mainly utilized for the production of milk and meat. The cattle are well adapted to a warm and wet environment but they do not thrive so well in dry, sandy areas. Part of the milk is utilized for the production of butter.

As a draft animal, the Kuri, on account of its heaviness and lethargic temperament and slow movement, gives a poor performance. It is reported that even as pack animals they suffer from the sun and get tired quickly.

Females calve for the first time when they are 3 ½ to 4 years old, and thereafter produce a calf every 15 to 18 months. They breed throughout the year, although the usual breeding season is from July to October. The average number of lactations during a lifetime ranges from 6 to 8.

The males are used for service after 3 years of age and have a breeding life of about 8 to 10 years.

French authorities report that the average lactation yield of Kuris is 600 to 700 liters after feeding the calf. The peak production in a day is about 6 liters. Lactation duration is 6 to 10 months and the calves are not weaned until the end of the lactation. A government herd is being established to study the breed.

The Government of Nigeria has established a Kuri herd at Maiduguri Government Farm in Bornu Province. Average milk performance of Kuris at this farm is given in Table 62.

TABLE 62. - MILK YIELD OF KURI COWS AT MAIDUGURI GOVERNMENT FARM

No. of cows	Average production, lb.	Days in milk	Average calving interval	Remarks
Average cows, 18	2 776	280	445	several lactations from each cow
Superior cows, 6	3 656	280	445	

SOURCE: Reed, R. L., *Personal Communication*.

Kuris in French territory have been reported to make excellent slaughter animals. They respond to natural grazing and are ready for slaughter at 5 years of age when they weigh about 1,100 to 1,300 lb. They dress out at approximately 50 percent, yielding about 500 to 600 lb. of meat. The shoulder is heavy and the proportion of bone is high.

Sources of breeding stock and information regarding the breed

Further information regarding the Kuri may be obtained from the following sources:

The Director of Agriculture, Kaduna, Northern Nigeria.

Director, Service de l'élevage et des industries animales, Fort Lamy, French West Africa.

Director, Service de l'élevage et des industries animales, Niger, French West Africa.