

The Rhinos of the Central African Republic

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Probably the least-known country in Africa today, with large areas of savanna woodland still unexplored, the Central African Republic has been thought, until recent times, to harbour the two genera of African rhinoceroses: **Ceratotherium simum cottoni**, the northern white rhino; and **Diceros bicornis longipes**, the West African black rhino. Despite the belief in the presence of the white rhino, few specimens are known to have been collected in the country, and records of its former occurrence are rare.

In 1932, M. Lavauden, the French Conservator responsible for central and western Africa, summarised some of the information concerning the occurrence of the northern white rhino. This suggested that its range extended from just north of Lake Albert in Uganda, northwest along the border between the Sudan and the Central African Republic (formerly Oubangui-Chari), as far as Goz Beida in Tchad (Figure 1). In 1927, the French Commission Supérieure de la Chasse was informed that the white rhino no longer existed in French territories (but then, somewhat illogically, it was given absolute protection by a law dated 25 August 1929) (Lavauden, 1934).

However, in 1927 the British Sudan border post at DjènÈnÈ seized a larger number of white rhino horns alleged to have come from Tchad, which were probably the 150 which Guy Babault saw in Khartoum and which were reported as originating from Abecher (Lavauden, 1934).

Malbrant (1952) records seeing horns of this genus in the hands of merchants at Birao in 1933, and three years earlier apparently saw one on the Aouk to the north of Birao (Malbrant, 1930). Lavauden (1932) considered that there was no doubt that small numbers of white rhino existed at that time southeast of Abecher in the region of Goz Beida; further, a museum horn of this genus comes from east of Mangueigne in Tchad. Lavauden also supposed that the rhino to the northeast and east of Yalinga was the white, and in 1934 he noted a white rhino killed northwest of Zemio (Lavauden, 1934).

Lavauden's map has for long been taken as representing the distribution of the northern white rhino, but may not be entirely accurate. Shortly before his death in 1979, M. Etienne Cannone (a French

hunter who went out to Tchad at the age of eighteen and is credited with killing over a hundred black rhino on the Aouk River) informed M. Lefol that he had also shot about a dozen white rhino in this region, on the Doseo, Mya and Keita tributaries, probably about 1936/7 (Lefol, pers. comm. 1985). This report extends the range of the white rhino 135 km further west than that indicated by Lavauden. Furthermore, if the pair of horns which Denham and Clapperton brought back from the southeast of Lake Tchad in 1824 (Malbrant, 1952; Bovill, 1966) are indeed those of a white rhino from Gaulfey (latitude 12° 25' N, longitude 14 50' E), then the range clearly extended even further west in this region. Denham recorded the white rhino to be "by no means common here" (Bovill, 1966); but "it seems likely that these horns are those of the black rhino, the base being round.

The former hunting inspector André Félix is alleged to have shot a white rhino between 1920-36 near Badia, which is on the Sudanese border to the east of the park which bears his name. The reason why the rhino shot by Cannone and André Félix are not on record is presumably because the animal was theoretically protected by law.

It seems to have been Blancou (1952) who originated the story of the possible survival of the white rhino in the Central African Republic. He thought that the last survivors in Tchad and the north of the Central African Republic had been shot about 1935, but that there was a faint chance a few might survive in the east, along the Sudanese frontier, from near the sources of the Kotto River southwards. Jeannin (1951) wrote that the Goz Sassouko National Park "in Chad" harboured 80 white rhino. Although this area was originally a part of Tchad, at independence it became part of the Central African Republic; but the "park" was de-gazetted to a reserve in 1940, and in 1960 the greater part was entirely de-gazetted, leaving the western part of 3 300 km² as the Aouk-Aoukale Faunal Reserve. Blancou (1948) was convinced, however, that all rhino had been exterminated there before 1939, and that the species to the southeast and south of the region (where some did still exist in 1981) was the black rhino. Gromier (1941) wrote that he saw horns of the white variety from Birao in 1931, and that a few years before 1941 he had seen several from the Vakaga region. He considered the white rhino to be probably extinct, although there were reports at that time that it still existed at Lake Mamoun, and between the Ouandjia and Vakaga Rivers. The Hunting Inspector, who was known under the pen-name of Saint-Floris, aptly summed it all up by calling the white rhino "the Loch Ness monster of French Equatorial Africa" (Gromier, 1941).

But old stories die hard, and when I came to the Central African Republic in 1974 it was still thought that the white rhino might exist in the Zemongo Faunal Reserve. Jan Rugsten claims to have made two sightings of white rhino, possibly both of the same animal, on the upper Ouarra River (Figure 2) in 1974 at about latitude 06° 10' N, longitude 26° 00' E (Rugsten, pers. comm.), but all other reports of rhino in this area have been of the black rhino. In view of the uncertainty, why should it be supposed that the animal might still exist in the Zemongo Reserve? The basic reason is that the wildlife resources of this 10 100 km² area (first gazetted as a hunting reserve in 1925 and upgraded to a faunal reserve in 1940) have never been surveyed. The reserve remains today the least-known part of the Central African Republic; part of a vast, uninhabited wilderness extending along almost the entire border with the Sudan. In the latter part of the 19th century parts of this area were probably well-inhabited, until the dervishes from the Sudan descended the Vovodo River about 1883 to pillage the country.



Figure 1. The distribution of the northern white rhinoceros, after Lavauden (1932), with additions.

Further pillaging probably took place about 1902 under the slave-raiding armies of Senoussi, who had his headquarters at NdÉlÉ (where one of his descendants occupied the position of sultan until 1985). In 1909-10, sleeping-sickness delivered the final, devastating blow, from which the area has never recovered.



Figure 2. Movements of early visitors to the Zemongo Reserve. Lupton, c.1882; Junker, 1883; Ebener-Martin, 1909-10; and white rhino sighting of Rugsten, 1974.

The first European to visit the region appears to have been an Englishman, Frank Lupton (governor of the Bahr el Ghazal Province of the Sudan) in about 1882. But he only crossed the southwest extremity (Figure 2) as did the explorer Junker, in 1883. In 1909-10, a French military detachment explored part of the area. From the former village of Zemongo, one of the team, M. Ebener, crossed the Vovodo River which forms the western boundary of the present reserve, and followed the east bank from Mount Meringuet to the village of Ano (= Ango?); he then re-crossed the Vovodo and continued south. Ebener, in Martin (1913), records that there was a route from Rafai, along the Vovodo to Mount Meringuet, where it branched to Raga and Dem Zubeir. This was used mostly by Greek and Syrian ivory traders.

The only reference to rhino in this account concerns their presence on the banks of the Boulou River, about 120 km to the northwest of Zemongo (Martin, 1913). The next visit seems to have been that of the Anglo-French boundary survey at the beginning of 1922, which traced the northeast boundary. Grassard (1925), the French mission leader, reports that some rhino tracks were shown to the team, but they were rare. He does not say where this was along the border with Sudan, but mentions that the Karas knew certain points between Birao and NdÉlÉ where they were sure to find rhino. This is the area where the black rhino has been known to exist in recent times. Comyn (1911) reported the white rhino as "pretty numerous" in the Sudan, northeast of Raga and about 210 km from the Zemongo Reserve. Christie (1924) said that white rhino were numerous in 1916 on the Congo side of the Mbomou River, about 220 km south of the Zemongo Reserve.

Thus it was reasonable to suppose that, if the white rhino had survived, then might be in the vast, unknown Zemongo wilderness,

which no European has yet traversed. One person is known to have ventured 30 km inside the reserve along the Bita River, and Rugsten (pers. comm.) went about a third of the way up this river in the 1960's, hunting crocodiles; but these limited expeditions did not yield information on white rhino.

The picture has now changed in any case, for the search for ivory in the late 1970's and early 1980's has motivated large Sudanese gangs'— equipped with automatic weapons— to penetrate the eastern part of the country with donkey and camel trains. These poachers may have covered the Zemongo area as well as they have covered the surrounding regions. Alternatively, since is such a large area, and much of it without water in the dry season, they may not have ventured too far from traditional routes.

About 1981 there was a report of a white rhino being seen near Golongosso in the north of the country, near the Aouk River, in an area which has been fairly intensively hunted in recent years and which is known to have contained black rhino (I saw rhino tracks there in 1976 but did not examine them closely). The report emanated from an American tourist-hunter and his Portuguese guide, both of whom had probably never seen a rhino before. Investigation showed the report to be unreliable, and there seems to be little doubt that they saw a black rhino. The tourist allegedly photographed it, but the photograph has never been produced.

The famous elephant hunter, Karamoja Bell, hunted this area along the Aouk about 1919 and reported rhino (among other species) as being numerous: "... I will ... merely remark on the extraordinary numbers of rhino we met..., on several occasions our boys got into trouble with them and they had to be shot in order to avoid accidents" (Bell, 1960). Since Bell was capable of identifying white rhino, and in his book specifically refers to seeing them in the Lado Enclave, he probably would have made it clear that the rhino along the Aouk were white if this was the case. We know from Cannone that some did exist there, but they seem to have been relatively uncommon and are only reported from the Tchadian side. Unfortunately, the recent report from Golongosso has found its way into the literature (Anon, 1983; Western and Vigne, 1984; 1985); it is certainly nonsense to suggest that there may be a "reasonable" population in this area, as the first of these references postulates. The last black rhino to the north of the Aouk River (near to the Bahr Tao, Keita and Midjik Rivers in Tchad) were seen by hunters in 1978; and Lefol (pers.comm.) records seeing the last tracks of one on the Golongosso side in 1983 (near Gaskay, 25 km south of Golongosso).

The black rhino once ranged westwards in Africa almost to the borders of Burkina Faso (formerly Upper Volta), about 75 km southeast of Niamey in Niger. Barth (1857-8) reported: "Here again the footprints of the elephant were extremely numerous; but by far more interesting, and of much higher importance to me, were the traces of the rhinoceros, an animal which at present seems to be wanting entirely in the regions between the Niger on the west and the Shari towards the east." But today the black rhino is extinct west of Cameroun, and the last stronghold was, until 1961, the Central African Republic. Before this date, it seems to have been distributed thinly throughout the area of the Republic east of about 19 between latitudes 07 to about 10 in the east extending south to 06 (Figure 3). The highest density of black rhino in those areas which were explored .was in the Bamingui-Bangoran National Park (an area of 11 560 km² gazetted in 1933) and in a region of 1 400 km² immediately to the east. Although Corfield and Hamilton (1971) reported finding only some old tracks in the park, they spent but a brief time in the fringe areas; they did report the rhino as common in the 860 km² Vassako-Bolo Strict Nature Reserve (which is in the centre) although no reason is given for this. When I started studies in the Bamingui-Bangoran National Park in 1976, it soon became apparent to me, based upon experience that I had gained in the Kenya Aberdares and other rhino areas of East Africa, that rhino were

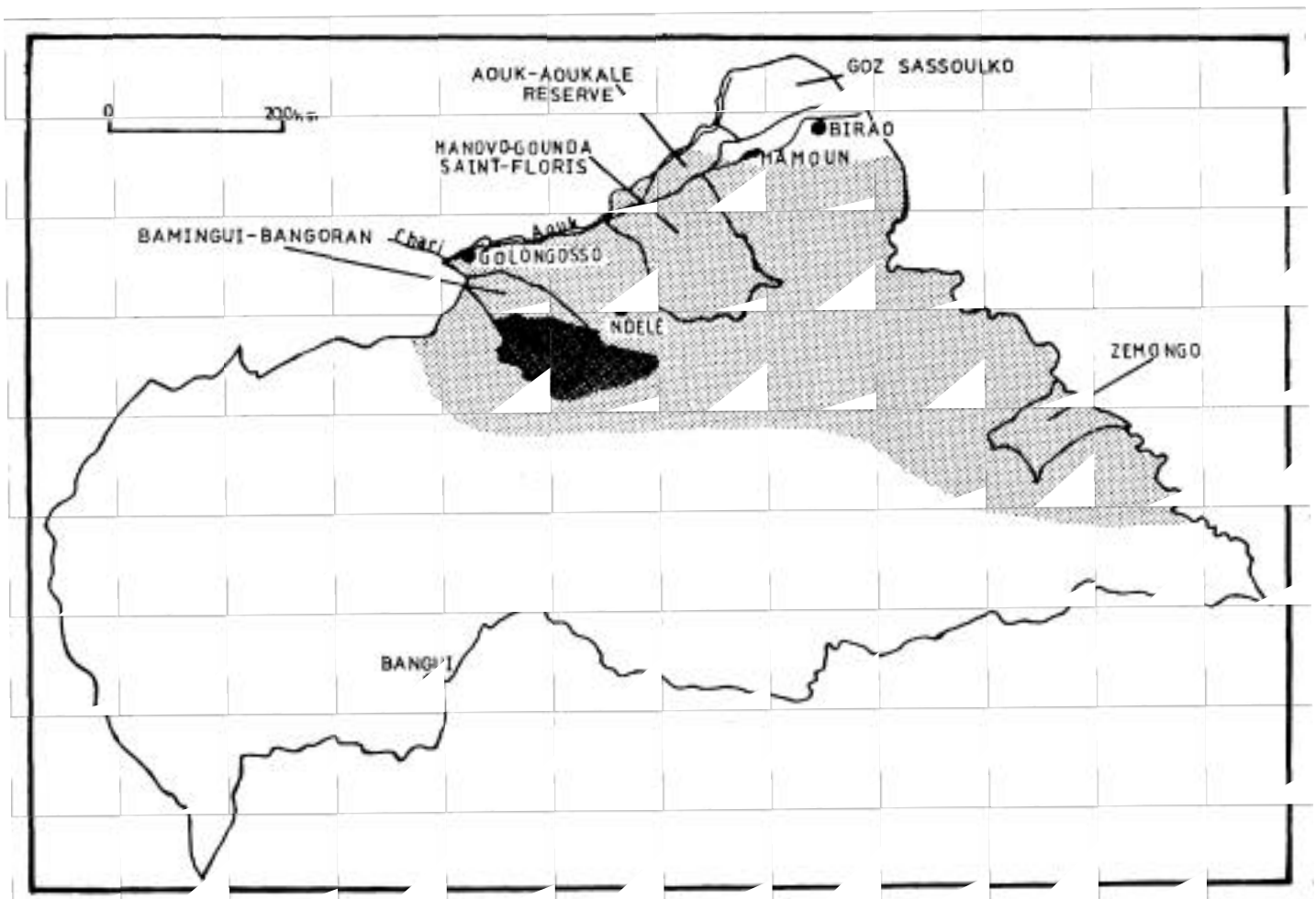


Figure 3. The former distribution of the black rhinoceros in the Central African Republic. Dense shading = known area of concentration.

reasonably abundant. There were snortings outside the tent at night, workers were tree'd, and a rhino came into the game

guard students' camp at night. Figure 4 shows plots of some of the fresh tracks and scrapes that I came across. Actual sightings were not common because of the nature of the sudano-guinean woodland, which makes it much more difficult to spot animals than is the case in the more open vegetation of eastern Africa. In other parts of the country, where the signs were much rarer, one must presume that there must still have been a sufficient density of black rhino to permit breeding contacts to take place (unless, of course, the rhino were already dying out).

Air surveys of the Bamingui-Bangoran Park, conducted by FAO in August 1977, reported a calculated total of 170 ± 70 (Spinage et al., 1977); but in view of the relatively dense vegetation and the fact that the survey was flown with a low-wing aircraft at 200 kph, I consider, from my ground contacts, that the real total was probably closer to 600 (a density of 0.05 rhino km^2). Subsequent counts conducted in the area to the east of the park, where the density was thought to be high, suggested a population of 60 ± 20 (IUCN, 1981), or a density of 0.04 rhino km^2 . To this we must add the fact that the rhino occurred at a lesser density over some 170 000 km^2 ; so assuming this density to be, say, one quarter of that in the centre of concentration (equivalent to 150 in the park), we arrive at a possible total of 2 125 for the rest of the country. Adding to this those in the park and the adjacent area, and rounding off, I suggested that there might be 3 000 in the whole country in 1981. Subsequent studies in the Manovo-Gounda-Saint Floris area to the north of the Bamingui-Bangoran area revealed a much higher density than had been supposed: about 0.03 rhino km^2 in the 770 km^2 study area (Hulberg and Carroll, 1982). Thus I am reasonably confident of my somewhat tenuous extrapolation, considering that the vast area concerned was for the most part almost completely unknown bio-

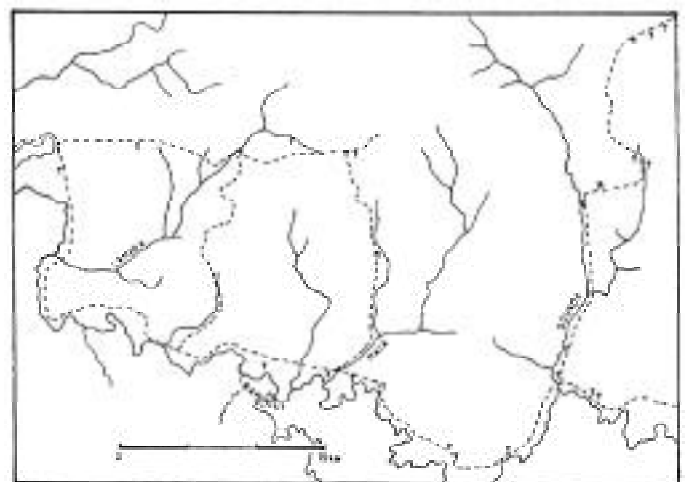


Figure 4. Some fresh rhino tracks and scrapes seen in the Bamingui-Bangoran National Park, 1980-81. T = track or scrape; R= 2 rhinos sighted; D = dead rhino (young one died in mud in dry season).

logically. However an alternative total of 440 has been proposed (IUCN, 1981) based upon a 1953 guess of 400 (Sidney, 1965), when the country was even less known than it is today. Whatever the true total may have been, it has undoubtedly been greatly reduced since the beginning of 1982.

During an air survey conducted in May-June 1985 by FAO/IUCN, no rhino were seen from the air, despite an intensive survey at 15% coverage of the former high-concentration area to the east of the Bamingui-Bangoran Park. Tracks seen at the beginning of 1985 show that the odd animal still exists in the southeast of the Manovo-Gounda-Saint Floris Park, and in the hunting sector near Ouanda Djallé, and rhino probably still exist in the Bamingui-Bangoran area. But it is feared that the species will become extinct in the Central African Republic in 1986, as the intensity of poaching by Sudanese horsemen, primarily in search of ivory, is at a level that can only be termed anarchic.

I have recently (1985) had the opportunity to measure the skulls of three adult black rhino from Bamingui and one from the Manovo-Gounda-Saint Floris region; and found the measurements to be closer to those of the Sudan race **D.b. brucii**, than they are to **D.b. longipes**. Thus it appears that the principal race in the Central African Republic may have been the now very rare **D.b. brucii**, and not **D.b. longipes** as Groves (1967) supposed; the Chari-Logone rivers forming the dividing line between the eastern and western races, it is hoped that a more extensive sample of skulls can be measured to verify this.

REFERENCES

ANON. (1983). Reports confirm northern white rhino close to extinction. African Elephant and Rhino Group Newsletter, No. 2:10.

BARTH, H. (1857-8). Travels and Discoveries in North and Central Africa. 5 vols. Longmans, London.

BELL, W.D.M. (1960). Bell of Africa. Neville Spearman and the Holland Press, London.

BLANCOU, L. (1948). Quelques précisions géographiques au sujet des ongulés. Mammalia, 12: 1-14.

BLANCOU, L. (1952). Notes on the black and white rhino in AEF. Sudan Wild Life, 2:16-17.

BOVILL, E.W. (1966). Missions to the Niger. Vol. III. The Bornu Mission 1822-25. Hakluyt Society. Cambridge.

CHRISTIE, C.C. (1924). Big Game and Pygmies. MacMillan & Co.,

London.

COMYN, D.C.E. (1911). Service and Sport in the Sudan. The Bodley Head, London.

CORFIELD, T.F. and HAMILTON, P.H. (1971). The Conservation and Management of Wildlife in Central Africa. The Cambridge Central Africa Project 1969-1970, Nairobi, mimeo.

GROMIER, E. (1941). La Vie des Animaux Sauvages du Chari Oriental. Payot, Paris.

GROVES, C.P. (1967). Geographic variation in the black rhinoceros **Diceros bicornis** (L., 1758). Z. Saugetierkunde, 32: 267-276.

GRASSARD, Lt. Col. (1925). Mission de Délimitation de 'Afrique Equatoriale Française et du Soudan Anglo-Egyptien. Librairie Emile Larose, Paris.

HULBERT, R.B. and CARROLL, R.W. (1982). Wildlife Research in Manovo-Gounda-Saint Floris National Park, Central African Republic 1979-1981. US Peace Corps, Mimeo.

IUCN (1981). African rhino group action plan for the conservation of African rhinos. Mimeo.

JEANNIN, A. (1951). La Faune Africaine. Payot, Paris.

LAVAUDEN, L. (1932). Les rhinocéros. La Terre et la Vie, No.9: 507-519.

LAVAUDEN, L. (1934). Les Grands Animaux de Chasse de 'Afrique Française. Societe d'Editions Geographiques, Maritimes et Coloniales, Paris.

MALBRANT, R. (1930). Note sur les mammifères du Tchad. Rev. d'Hist.nat. appliquees (nov.).

MALBRANT, R. (1952). Faune du Centre Africain Française. Paul Lechevalier, Paris.

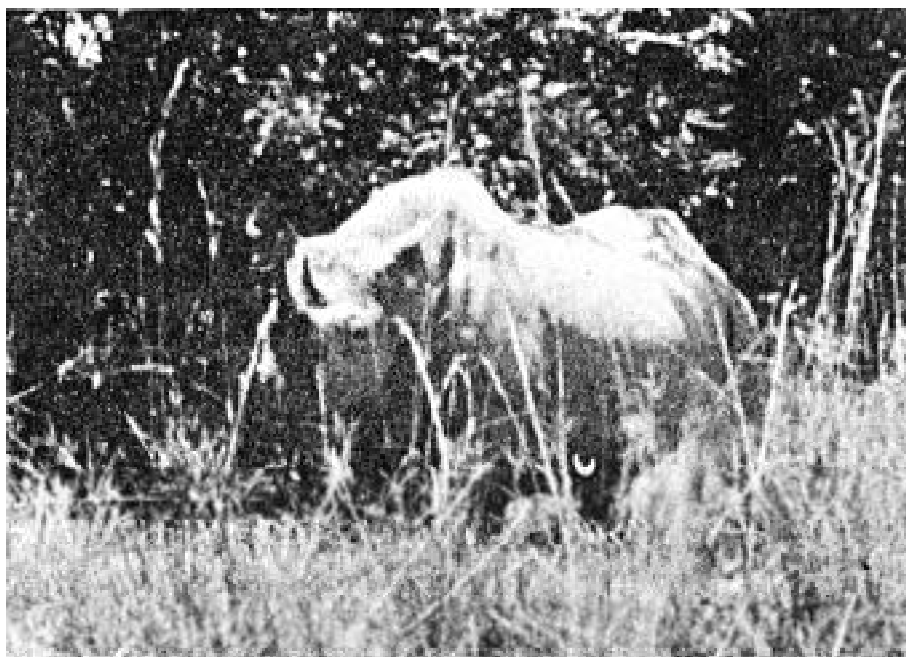
MARTIN, M. (1913). Au Coeur de l'Afrique Equatoriale. Librairie Chapelot, Paris.

SIDNEY, J. (1965). The past and present distribution of some African ungulates. Transactions of the Zoological Society of London, 30: 1-397.

SPINAGE, C.A., LOEVINSOHN, M.E. and NDOUTE, J. (1977) Etudes Additionnelles du Parc National Bamingui-Bangoran. FAO, Rome. Mimeo.

WESTERN, D. and VIGNE, L. (1984). The status of rhinos in Africa. Pachyderm, No.4: 5-6.

WESTERN, D. and VIGNE, L. (1985). The status of rhinos in Africa. Swara 8, No.2: 10-12.



Rhino in the Bamingui-Bangoran National Park.