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THE PAST AND PRESENT DISTRIBUTION OF THE BLACK AND SQUARE LIPPED RHINOCEROS IN THE WANKIE NATIONAL PARK

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In the past both the black, *Diceros bicornis*, and square lipped, *Ceratotherium simum*, rhinoceros occurred in the area that is now Wankie National Park.

When Davison arrived in 1928 to establish the Park there were no rhino present although there were a number, possibly five, on the Mabali River not far east of the railway. He records, however, that there were reports of their existence within what is now the Park boundaries up to about 1925 (no species stated) (Davison, 1947).

Since then both species have been re-introduced and appear now to be holding their own.

BLACK RHINOCEROS, *D. bicornis*.

In the literature, the first reference to rhino in the vicinity of what was to become Wankie National Park is by Selous (1908). This observation was made five miles northwest of Main Camp (Dett vlei) in October 1873. Selous observed both the black and the square lipped together in the same vlei. Oates (1881) reported seeing rhino (species not stated) between Sibanani (Sibanini; Dzivanini) and Tamasanka (Tamasanka) in November, 1874. Both areas are now in Wankie National Park (See Map 1).

The late Kelly Edwards (Conservator of Forests) saw rhino (species not identified) in 1912 at old Ngamo, (just north of Ngamo Siding) adjacent to the border of the Park. A farmer at Sinamatela Ranch, Sinamatela now part of the Park, possessed a horn found in 1926. This unfortunately was not identified as to species.

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In 1942 a pair of black rhino were seen in the Park in the vicinity of the Deka River (near Robins Camp). They were sighted on numerous occasions until 1946 when they wandered onto Sunnyside Farm, now called Mbisa (on the railway between Ngamo and Ingwe Sidings) where the male was mistaken for an eland and shot. The other animal roamed extensively in the Park where spoor was last seen in the vicinity of Ngamo in 1956. This rhino is believed to have been taken by a poacher, as a piece of skin was found in a Bushman camp near the Nata River.

An immature female black rhino, captured near the newly forming Lake Kariba, was moved to the Park on 13th November, 1961 and housed in a paddock at Main Camp. It was subsequently moved to Matopos National Park, as the authorities felt it was too small to fend for itself against predators and later to the National Zoological Gardens, Pretoria.

In October, 1962 six male and two female black rhino were shifted from Kariba to paddocks at Mandavu Dam. The Mandavu/Sinamatela area was chosen as it had hills and thick bush and was apparently suitable habitat. The animals were then released into the Park. With one exception they appear to have settled down on the basalt soils, between Sinamatela and Robins, and in the Controlled Hunting Area which lies immediately to the north of the Park.

In March 1963 three females and one male of this species were transported from Kariba. One of these females died in April 1963 at Mandavu Dam as the result of a fight with another rhino. In May 1963 a second rhino, a male, was found dead in the same area. From the bruises on the body it appeared that this was the animal that had fought with the female and had now died of the injuries received. By March 1963 therefore, there were eight black rhino in the Park.

In 1965 a further 40 animals were introduced from the Miwenda Native Purchase Area in the Binga District. These were held in the Mandavu and Salt Pans paddocks before being released into the Park. Unfortunately, no record was kept as to sex and age. This brought to 48 the total number of black rhino in the Park in 1965 (See Table 1).

A search was made for black rhino on 25-27th August, 1971 using a helicopter at an average height above the ground of 100 m with flight paths 800 m apart. The search lasted a total of 6 hours and was limited to between 1600 and 1800 hours. The area between Robins and Sinamatela camps as well as Dandari borehole were covered (See Map 1). A total of seven, six adults and one calf, was recorded.

The latest figures (May 1971) give seven in the Robins-Detema area, three in the Sinamatela area, 11⁺ in the Wankie Controlled Hunting Area, one in the Mtoa area of the Park and one in Giraffe Springs—6 miles southwest of Shapi, a total of 23⁺. Calves have been sighted repeatedly but no precise count is available.

Accordingly there are at this date 23⁺ black rhino in the Wankie National Park and the adjoining Wankie Controlled Hunting Area, as determined by recent surveys.

The fate of the balance cannot be determined. However, there is good evidence for breeding as calves are repeatedly sighted.

SQUARE LIPPED RHINOCEROS, *C. simum*.

Probably the last square lipped rhino naturally occurring in the vicinity of Wankie National Park was recorded by Selous in the Dett Vlei five miles northeast of the Park's eastern boundary (Selous 1908).

Over the period 13th November, 1966 to 12th March, 1967 the Park received 35 square lipped rhino, 16 males and 19 females (Hatton 1968) from the Umfolozi Game Reserve in Natal, Republic of South Africa. They were confined in holding pens 24 miles southeast of Main Camp and then later moved into paddocks. The large vlei system surrounding the area was judged to be the most suitable square lipped rhino habitat in the Park.

On the 7th December, 1966 the first rhino broke out of the paddock. It was sighted ten hours later 25 miles from the release point, and is believed to have taken up residence in the Shumba area of the Park.

From 8th December, 1966 to 21st April, 1967 the remaining animals either broke loose or were released into the Park.

As was expected, the first rhino released into the new surroundings took considerable time to settle down. Some travelled great distances. Six are known to have moved west into Botswana. Two of the six, an adult female and her calf died of thirst in July 1968 at Odiakwe, north of Makgadikgadi Pan, Botswana. This was 140 miles west of the release site. The remaining four rhino have been reported in eastern Botswana by safari hunters and the Botswana Department of Wildlife and National Parks, e.g. one, Khwaai River 1971, and one approximately 40 miles south of Sua Pan in 1969.

Nine rhino crossed the eastern boundary of the Park where one adult female was shot by a farmer on Dahlia Ranch on the 27th October, 1967. It is probable that the other eight have since returned to the Park.

In March 1968 an attempt was made to capture two square lipped rhino to the north of the Park in the Matetsi area. It was not determined where these animals came from as four had been released in the Victoria Falls National Park.

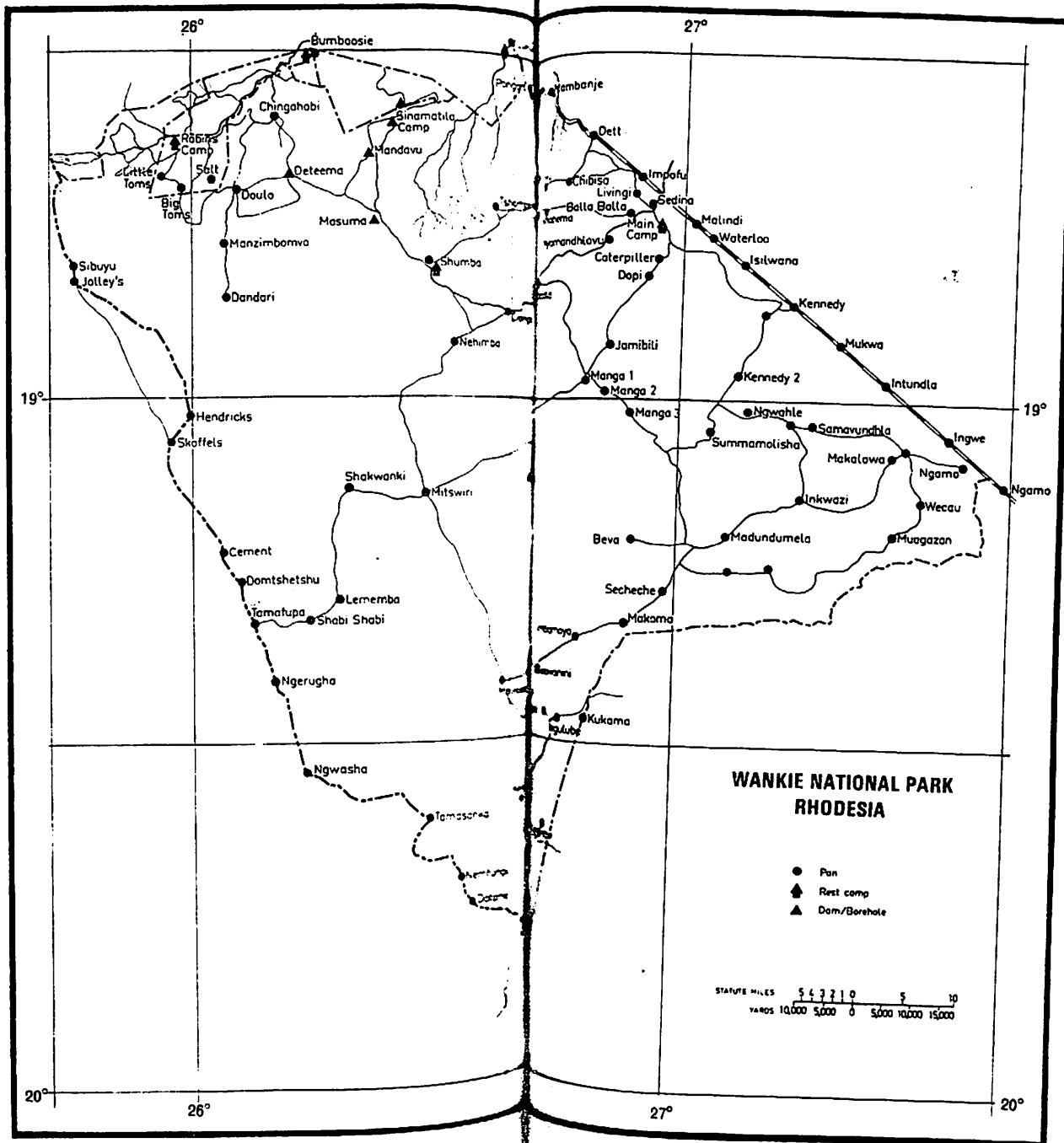
In the darting, the male was hit in a vein and died while the female was successfully darted and transported to the Linkwasha (Inkwazi) vlei in the Wankie National Park.

Since August 1967 six square lipped rhino deaths have been recorded in the Park and surrounding area (Table 1).

It is interesting to note that of the nine dead square lipped rhino, six were adult females, one was an adult male and two were calves. This removal of six adult females from the original 19 would certainly lower the breeding potential. Therefore, of the total 35 introduced rhino, 26 of the originals are probably still in the Park.

The latest census (September 1971) gives four square lipped rhino in Robins-Detema area, four just outside the Park in the Wankie Controlled Hunting Area, two in the Sinamatela area, two at Shumba and 20⁺ in the Kennedy-Madundumela-Linkwasha (Inkwazi) vlei system, or a total of 32.

Numerous calves and sub-adults have been recorded, suggesting that a viable population has been established.



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TABLE I

BLACK AND SQUARE LIPPED RHINOCEROS DEATHS: WANKIE NATIONAL PARK AND BORDERING AREAS

<i>Age</i>	<i>Date</i>	<i>Area</i>	<i>Cause of Death</i>
Black Rhinoceros, <i>D. bicornis</i>			
adult	June 1970	5 miles E. Sinamatela Camp	Skull found—unknown
adult	— 1965	Deka Farm	Predation by lions
adult	April 1963	Mandavu Dam	Fighting with another rhino
adult	May 1963	Mandavu Dam	Fighting with another rhino
TOTAL		.. 9 square lipped 4 hooked lipped	
Square lipped Rhinoceros, <i>C. simum</i>			
adult	August 1967	Manga Vlei	Shot by terrorist
adult	October 1967	Dahlia Ranch (Gwaai)	Shot by farmer
adult	March 11th 1968	Matetsi	Dart hit vein
adult	July 1968	Odiakwe (Botswana)	Thirst
calf	July 1968	Odiakwe (Botswana)	Thirst
adult	August 17th 1968	Isilwane	Killed by train
adult	October 1969	Masuma Dam	Stuck in mud
adult	January 1970	Masuma Dam	Skull found—unknown
adult	June 1970	Mbazu-Mandiscka	Poached