Pretoria Zoo Has a Baby White Rhinoceros

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You'd say it was impossible to have such luck—but here is the story of little Zuluana who was captured when she was one day old, and now lives in the Zoo.

THE PROSPECT of obtaining a pair of the Square-mouthed or White Rhinoceros (*Ceratotherium simum simum* (Burch.)) for the National Zoological Gardens was first investigated as far back as November of the year 1928. At that time there was a possibility that some Square-mouthed Rhinoceroses would be transferred from Zululand to the Kruger National Park, in which area they had formerly occurred. According to Kirby [1] the Square-mouthed Rhinoceros disappeared from the Matamiri Bush in the southern part of the present Kruger National Park in the year 1896. If the transfer were attempted, the Provincial Secretary of Natal was requested to place a pair of White Rhinoceroses at the disposal of the National Zoological Gardens.

Further attempts to obtain White Rhinoceroses from Zululand were made in the intervening years, especially in collaboration with the Director of the Transvaal Museum. At present there is only a bull in that Museum's collection, and more specimens are required for a group. It was not until recently, however, that success was achieved by the National Zoological Gardens in an entirely unexpected manner.

On July 26, 1946, the Honourable D. E. Mitchell, Administrator of Natal, telephoned me from Durban at 12:30 p.m. and stated that a baby female White Rhinoceros had been obtained in Zululand. He generously offered the animal for the national collection and suggested that a lorry be sent to convey it to Pretoria. This kind offer was promptly accepted, and at 5 p.m. on the same day Keeper K. de Waard and Mr. R. Bruins-Lich left the Zoo by lorry for Zululand to fetch the baby White Rhinoceros. They drove right through the night and reached Captain H. B. Potter at the Hluhluwe Game Reserve at about 7:45 p.m. on July 27. The following morning they proceeded to the Nagana Research Station at Masimba Mountain and reached the animal at about 9 a.m. At about 12:15 p.m. on the same day, i.e. July 28, they departed for Pretoria and again drove right through the night. Pretoria was reached on Monday, July 29, 1946, at about 1:30 p.m. After a trip of about 425 miles from Zululand, "Zuluana," as the baby White Rhinoceros has been called at Captain Potter's request, was safely in the National Zoological Gardens. In fetching the animal the lorry covered a distance of about 860 miles.

The manner in which "Zuluana" was procured is related by Mr. A. Adank, the Senior Game Ranger in Zululand, in a letter dated August 12, 1946. The relevant extracts are as follows:

"The belt of Crown Lands around the Umfolosi Game Reserve is from 5 to 8 miles wide and is known as the 'buffer zone.' Some time

[1] F. V. Kirby. In Haunts of Wild Game. Edinburgh (1896).

Photo by Dick Wolff

Fig. 1. "Zuluana" at the age of six days, on July 29, 1946. The head is long and truncate anteriorly, the truncation accentuated by the fact that the anterior horn is a mere knob at this stage. On each side of the head behind the eye there is a prominent bony protuberance, the squamosal protuberance (noticeable also in Fig. 3). The nuchal callosities are visible in this picture, but more prominent in Figs. 7 and 8. On the sides of the body there are well-developed juvenile skin folds between the scapular and the pelvic fold; these are less prominent when the animal has had a good drink of two bottles of milk. The umbilical cord is still visible at this time, July 26, but the dry vestige fell off on July 31. There are two inguinal mammae, each with one teat. No teeth were present on July 29.

Our readers will find the legends under the pictures in this article somewhat technical. In a report of such interest to zoologists, it is important to stress technical features.

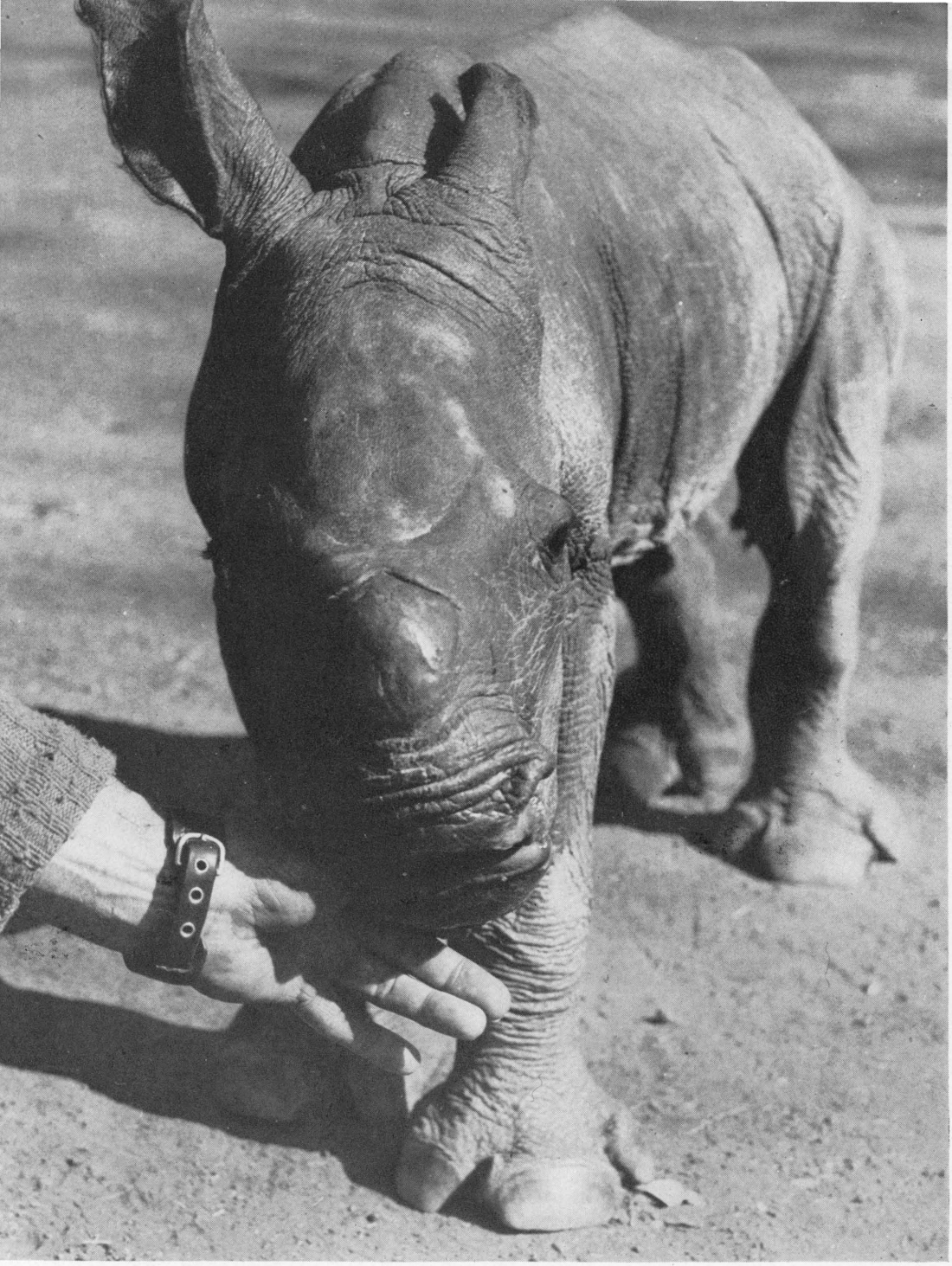

Photo by Dick Wolff

Fig. 2. August 7, 1946; age fifteen days. At its base the incipient anterior horn is shaped like a shield with a rounded free surface (to be seen in Fig. 3 also). It is covered with a black, more or less shiny, membrane; it is believed that this membrane will be shed in due course. At this stage there is no trace of the posterior horn, but a short distance behind the anterior horn there are two slight concentric depressions, one on each side of the middle line. Behind these depressions the forehead is flat with the skin tightly stretched over it.

Photo by Dick Wolff

Fig. 3. August 7, 1946; age fifteen days. The ears are long and fringed with soft black hair along the entire free edge of the pinna. The shield-shaped incipient anterior horn is quite noticeable here, as is the bony protuberance behind the eye.

ago a few White Rhinos from the southern buffer zone wandered on to the farms on the south and caused some damage to fences. It was then decided to attempt to drive the Rhinos out of the southern buffer zone through the White Umfolosi River into the Umfolosi Game Reserve.

"Captain Potter, the Game Conservator of the Hluhluwe Game Reserve, placed five reliable game-guards at my disposal. With these, ten of my own game-guards and seventy labourers (native) from our bush-clearing works, our first day's drive on July 23, 1946, proved unsuccessful, as the Rhinos stampeded back as soon as they got near the river.

"On July 24, 1946, the drive was repeated over the same area with the same natives, when we managed to chase a few (White Rhinos) through the river. While the drive was proceeding on the second day, one of my natives came and reported to me that a (White) Rhino cow, scared by the noise, had left its baby near the hyaena caves under the Sangoyana Hills. I sent him back immediately with instructions to guard it against the hyaenas, of which a pack of eight had been seen in the same vicinity during daytime about a week before.

"I reported the matter to Captain Potter, who anticipated that the mother would return, and if she did not, the question arose where milk was to be obtained, as everybody in that part of Zululand used tinned milk which was unobtainable for most of the time. I begged to be given the opportunity to try and rear it (i.e. the baby White Rhino), and stated that I did not mind giving most of my salary for this purpose every

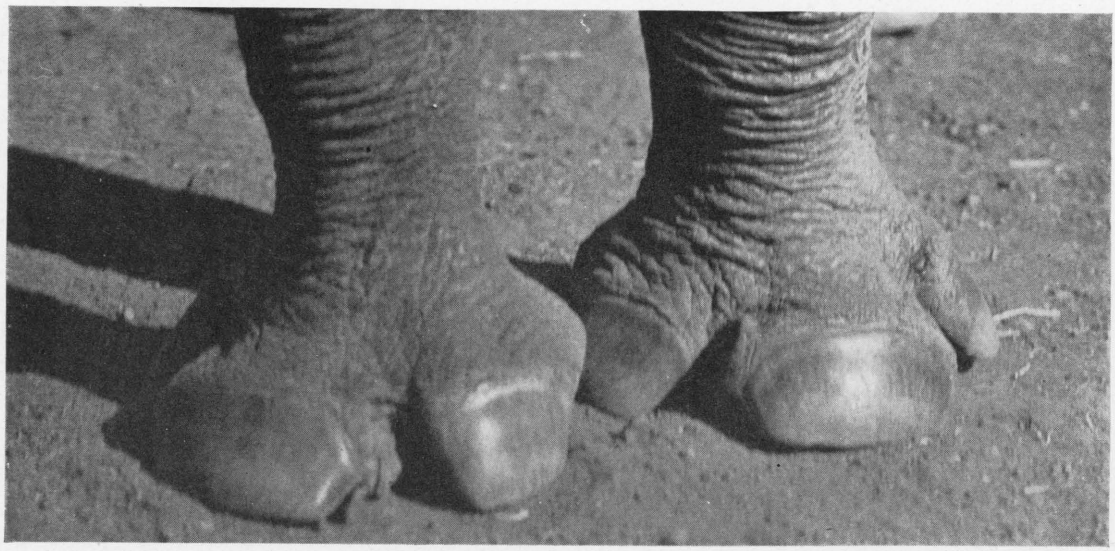

Photo by Dick Wolff

Fig. 4. August 7, 1946; age fifteen days. The toes are large with wide and thick black hoof-like nails, three on each foot.

Photo by Dick Wolff

Fig. 5. August 7, 1946; age fifteen days. When the baby is about to lie down, it sinks down on the hind limbs by bending the thigh downward toward the shank in such a manner that the posterior angle between the thigh and the shank becomes smaller. As the flexion is greater in the case of one hind limb than in the other, the animal comes to lie on that side with that hind limb underneath the body. The front part of the body comes to rest with the fore limb bent upon itself at the wrist (carpus), i.e. the palm (metacarpus) is apposed to the forearm. The ears are laid back against the body. The animal may also turn completely over on its side with the four limbs projecting completely. In the act of rising, the front part of the body is the first to be raised and the hind part follows.

Photo by Dick Wolff

Fig. 6. August 7, 1946; age fifteen days. A posterior view of the baby White Rhinoceros.

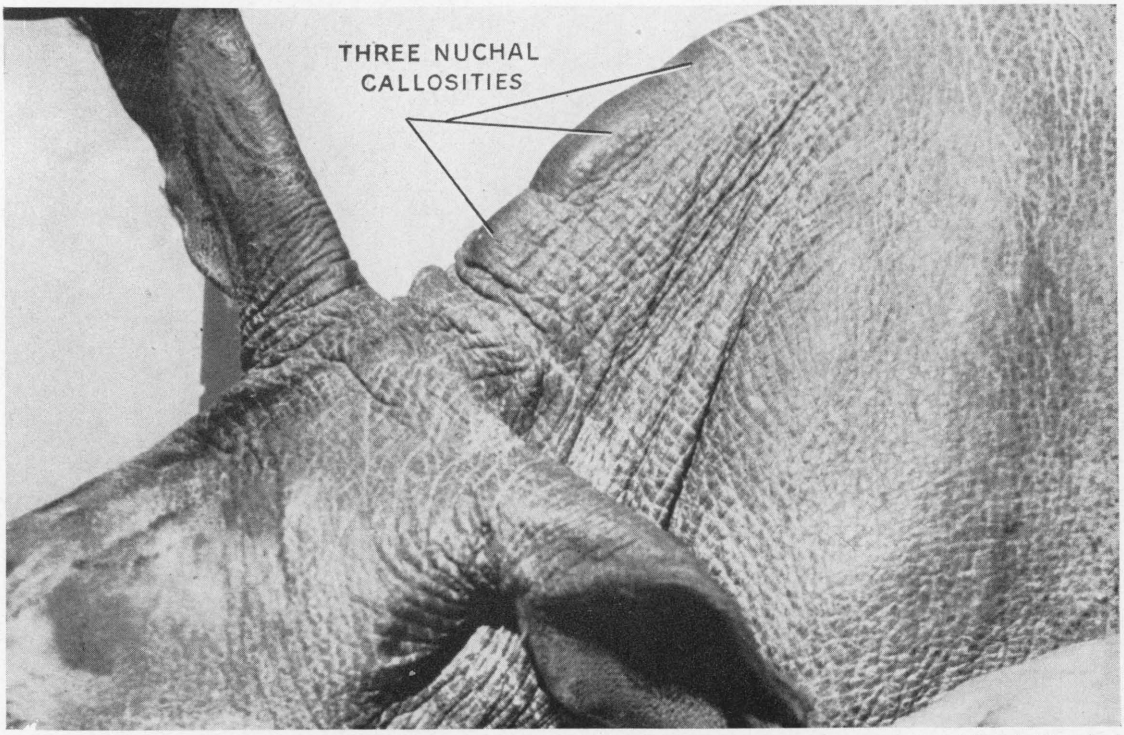

Photo by W. Schack

Fig. 7. Nuchal callosities from the left side

month. Captain Potter granted permission on condition that if I found its mother had come back, I should let it go. I was happy that I was allowed to adopt this child and, asking Mr. T. Scheepers and Mr. K. de Haas to accompany me, I started the journey to Sangoyana with a three-ton lorry on which I had my camping equipment. We got to the Rhino an hour before sunset; it was a relief to find that the mother had not returned.

"I spread my tent to pad the lorry near the cab, then spread my mattress on the tent. We put the Rhino into a bag up to the neck to prevent her fighting to get up, then lifted her gently on to the bed where she fell asleep after the first mile and slept until we got to the camp of Messrs. Scheepers and de Haas, fifteen miles from the Nagana Research Station. From there two natives were placed in charge of the Rhino while I drove on, cruising down the hills and holding thumbs for petrol whenever we went uphill. The petrol lasted to within three miles from the Research Station. I paid a native five shillings to run for petrol, and Mr. Scheepers from the Research Station brought some. It took five minutes to prepare the room and put 'Zuluana' where Mr. de Waard found her (i.e. at the Nagana Research Station).

"As my car was at a garage for repairs, I got Mr. Scheepers to take me in his private car at one shilling a mile to find milk. We travelled 35 miles with no success and were back at 11 p.m. We gave 'Zuluana' a little 'Klim' which Mr. Goosen could spare. She greedily sipped it out of a dish.

"I obtained permission to use my half-ton official lorry to go and see whether I could raise one of my own cows at Mkuzi with enough milk to rear the Rhino. At 11:30 p.m. I started for Mkuzi.

"It is very dry at Mkuzi, and I did not have a cow with sufficient milk. So I bought one for twenty pounds. At 2 p.m. (July 25, 1946) I had offloaded and milked the cow here (i.e. at the Nagana Research Station) and 'Zuluana,' after only two feeds of 'Klim,' got her first feed of cow's milk. The speedometer showed 190 miles."

In amplification of the above, Mr. D. E.

Figs. 7 and 8. August 21, 1946; age 29 days. On the neck in front of the withers are three epidermal callosities to which Dr. R. Broom called the author's attention. (Also shown slightly in Fig. 1.) They consist of a larger central callosity about 2¼ inches long, a short anterior callosity about 1 inch in length, and a still shorter posterior callosity about ½ inch long. Both the anterior and the posterior callosity are separated from the middle callosity by a transverse groove; these grooves are very clear when the animal bends its head upward. The middle callosity is well developed and hard to the touch, and the posterior callosity is least developed. Their length varies with the position of the head. When the mouth is near to the ground (as in Figs. 1 and 7) the callosities are stretched somewhat, and in this position the posterior callosity is just distinguishable. These callosities may be called the nuchal callosities.

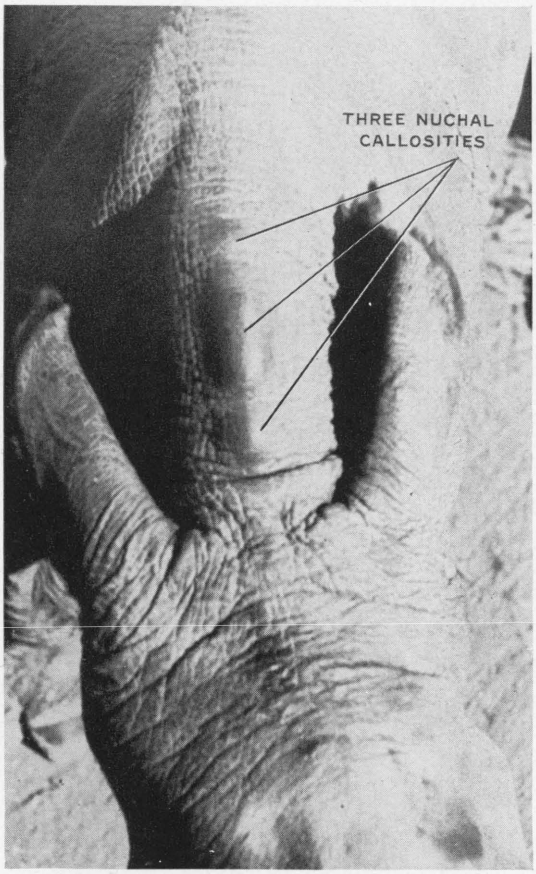

Photo by W. Schack

Fig. 8. Nuchal callosities from the front.

Mitchell informed me verbally that the drive on July 24 took place very early in the morning. Mr. P. J. Goosen of Onderstepoort, who was present at both drives, states that no baby White Rhinoceroses were observed on July 23. The calf "Zuluana" was found early on the morning of July 24, and in the evening the adhering part of the umbilical cord was still soft and wet. Hence the animal had probably been born during the previous night. It will be assumed that the date of birth is July 23, 1946.

It is clear that the acquisition of the baby White Rhinoceros is the result of a sequence of fortunate events. Its significance lies in the fact that no specimen of *C. simum simum* has previously found its way to any zoological garden in the world.

On August 1, at the age of ten days, the animal stood 60 cm. (about 23½ inches) high at the withers, and a week later, on August 7, it was weighed and found to be 105¼ pounds. [A later communication from Dr. Bigalke reported a weight of 161 pounds on November 23.]

It is intended to keep records of the growth of the baby White Rhino and to publish these in due course. A few observations may, however, be included at this stage.

The baby gives vent to a soft, high-pitched whine, and it can generally be induced to do so if the keeper tries to imitate the sound.

In the complete act of defecation soil is scraped over the excrement by means of alternate backward movements of the two hind limbs. Partial defecation sometimes takes place while the animal is being fed from a bottle, and then the scraping has not been observed.

The young animal is making good progress, and there is every hope that it will be reared.