

OCCURENCE AND CATCHING OF WHITE RHINOCEROS (CERATOTHERIUM
SIMUM COTTONI) IN THE PROVINCE UPPER NILE - SOUTH
SUDAN

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In Africa live two species of rhinoceros - Black rhinoceros (*Diceros bicornis*) and White rhinoceros (*Ceratotherium simum*). Both of them are very rare nowadays and belong to endangered species. Black rhinoceros are more numerous and we were catching them for our zoo garden in Kenya in 1971. White rhinoceros form two sub-species. South of the Zambezi river, *Ceratotherium simum simum* live very rarely numbering some tens of pieces in south east Angola and some more pieces in South Africa. It has never been seen south of the Orange River and is now only found in the Hluhluhwe and other National Parks, in Zululand, and in certain regions of Rhodesia. Altogether there are about three thousand of them there. Much rarer is the other sub-species *Ceratotherium simum cottoni* that lives north of the Zambezi river. Its rare occurrence is attested by the fact that it is kept in captivity in three zoo gardens in the USA only - they have seven of them and one male is kept in England.

It is reported that about 120 of these rhinoceros live in ZAIRE in the region East Ubangi-Schari and in North Velle. Some more animals live in the southwest part of the

Central African Republic, some in the South Sudan, and about 150 of them in north-west Uganda, in the West Nile District and in Madi.

In view of the fact that our zoo specializes in keeping African fauna and has now 8 Black rhinoceros and 9 White rhinoceros (*C. simum simum*), we decided to try to catch in South Sudan some 6 rhinoceros *C. simum cottoni* at least.

Catching and Choosing of Regions

After two years of searching and many intergovernment discussions, the government of South Sudan granted us permission to catch 6 rhinoceros (*C. simum cottoni*), two males and four females, in the Upper Nile province. After preliminary aerial survey carried out in a Piper Super-Cub, we have chosen as the most suitable place for our catching activity and for building our camps the villages Shambe and Mongalla (see map enclosed). The camp Mongalla was built some 3 km north of the village on the right bank of the river Nile in the shade of the growth. In the vicinity of the Mongalla camp we were catching elephants, Cape buffalos, hartebeeste and gazelles. We did not try to catch White rhinoceros there because of their rare occurrence in this region. The Shambe camp was built near a road some 14 km from a village of the same name, in an open countryside. Rhinoceros appeared very often near this camp and it was also a good place for catching Thiang hartebeeste. We started our catching activities and at the same time construction of enclosures at the beginning of January, 1975. For our catching we used two land-rover cars TOYOTA. After a detailed land survey and with the assistance of our Piper Super-Cub plane, we succeeded in catching in the course of January 4 males and six females in the age of 2 - 5 years. One two-year old Rhinoceros (male) died at the beginning of March and one male and two female rhinoceros were handed over as a gift to a

small state zoo garden in Juba as a property of the Game Department Head-office in Juba. It was done on the request of the South Sudan government.

Transport of the rhinoceros from the camp to Europe proved to be the most difficult task of our expedition. We transported these animals to Juba on a bigger raft from a small loading platform in the Shambe village. This part of the transport upstream the river Nile took three days. Further transport by air from the Juba airport to Chartoum and then to Europe was impossible as the Juba airport was too small to enable landing of big airplanes and had no loading facilities available. Also transport on barges to Port Sudan on the river Nile was impossible as some sections on the Nile were impassable. Therefore, we loaded our rhinos on lorries and transported them along dusty roads across the border checking point Nimule to our camp Karamoja in Uganda. From there the rhinos were transported together with all our East - African animals to the port Mombasa in Kenya, then by a freighter round Africa to Hamburg. There they were reloaded on barges and transported upstream the Labe river to Czechoslovakia.

Description of the area of occurrence

In the course of our two months' catching campaign, we used daily a small aircraft, and during flying in strips the pilot and me counted all rhinos from the plane. Thus we flew over the region Wau, Tonj, Rumbek, Yirol, Shambe, Tali post, Mongalla, Gemmeisa, Bor, Jonglei and Kongor. Together we flew 182 flying hours, i.e. with the average speed of 110 km/hour we covered a total 20 000 km.

Apart from this, we made notes on rhinoceros occurrence from our land-rover cars. On the whole, we counted 264 rhinoceros from the aircraft. The rhinoceros in the Shambe region were counted several times. The whole population

of White rhinoceros was divided into those living on the left bank of the river Nile and those living on the right bank.

From our cars we saw altogether 62 rhinos. In our both counts, we eliminated regions where we had carried out our survey earlier. According to our experience from former ecological surveys, for the survey by air we used the coefficient 1 : 3 of traced rhinoceros, for that by car the coefficient 1 : 12. Thus the definite count by air-survey is $264 \times 3 = 792$, by car-survey $62 \times 12 = 744$.

On the basis of the whole survey we can estimate that in this particular region some 770 rhinoceros were living at the beginning of 1975.

In the first area on the left bank of the Nile	110 rhinoceros
In the first area on the right bank of the Nile	30 rhinoceros
In the second area on the left bank of the Nile	250 rhinoceros
In the third area on the left bank of the Nile (Shambe region)	380 rhinoceros

As to the border of areas of occurrence and as to the results of our survey, we consulted experts from the Game departments in Wau and Juba, and officers of individual regions.

Furtheron, we found out that in the small Nimule National Park and in other regions bordering Zaire and Central African Republic, *C. simum cottoni* was practically wiped out after World War II and mainly in the time of the Civil War.

Measures suggested for saving White rhinoceros in the Sudan

It would be necessary to establish a National Reserve in the Shambe region as a first step towards protection of animals. Borders of this National Reserve coincide roughly in the north with the second area of occurrence as far as Yirol, then the border might be formed by the dust road to Madbar, Tior and Papiu. In this area live most of the rhinoceros, some 500 of them. As a second step, after making Juba a cultural, tourist and hunting centre of the South Sudan, change the Reserve into a National Park, complete the road building in the Shambe region and along the Nile. Behind the village Shambe build an attractive tourist hotel close to the Nile with a small field airport in its vicinity. Visit to the National Park would be thus possible either by air from Juba or by a small river boat on the Nile, which would be even more attractive.

Summary

In the course of January and February 1975, we carried out in the Upper Nile region around the Shambe village catching of 10 White rhinoceros (*C. simum cottoni*). Six of them were transported to Czechoslovakia. At the same time we carried out a detailed survey of their occurrence and determined borders of areas of their occurrence.

We have found out that in the particular regions of South Sudan live about 780 rhinoceros. In other regions in South Sudan these animals were practically wiped out in the last twenty years. This fact shows clearly that these White rhinoceros have become very rare and represent an endangered species now. Therefore we suggested the establishment of a Shambe National Park in this region, which would be a major step towards their permanent protection.

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ВАГНЕР Й. (Восточночешский зоологический сад, Двор Кралове над Лабем). Наличие и отлов белого носорога (*Ceratotherium simum cottoni*) в области верхнего Нила в южном Судане.

В январе и феврале 1975 года в области верхнего Нила, в окрестностях городка Шамбе, мы провели отлов 10 белых носорогов (*C. simum cottoni*), из которых 6 привезли в ЧССР. Одновременно мы провели подробное научное исследование их наличия и определили границу их распространения.

Мы определили, что число живущих белых носорогов в изучаемой области южного Судана составляет приблизительно 780. В остальных областях южного Судана, за последние 20 лет, они были истреблены. Из приведенных данных вытекает, что белые носороги весьма редкие животные и им грозит опасность полной гибели. Потому мы предложили создать национальный парк в областях Шамбе для их постоянной охраны.

VÁGNER J. (Východočeská zoologická zahrada, Dvůr Králové nad Labem). Výskyt a odchyt bílého nosorožce (*Ceratotherium simum cottoni*) v oblasti horního Nilu v jižním Súdánu.





V lednu a únoru 1975 jsme v oblasti horního Nilu v okolí městečka Shambe provedli odchyt 10 bílých nosorožců (*C. simum cottoni*), z nichž jsme 6 dopravili do ČSSR. Současně jsme provedli podrobný výzkum jejich výskytu a stanovili hranice jejich rozšíření.

Zjistili jsme, že těchto bílých nosorožců žije ve studované oblasti jižního Súdánu asi 780. V ostatních oblastech jižního Súdánu byli v posledních 20 letech vyhubeni. Z uvedeného výsledku vyplývá, že bílí nosorožci jsou velice vzácní a existenčně ohroženi. Navrhli jsme proto zřídit v oblastech Shambe národní park na jejich trvalou ochranu.

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| 1 RARE OCCURRENCE |  | 3 FREQUENT OCCURRENCE |  |
| 2 OFTENER OCCURRENCE |  | 4 CATCHING CAMP |  |