

STAATSMUSEUM - WINDHOEK - STATE - MUSEUM - WINDHOEK - STAATSMUSEUM Ser. A. - Vol. 7 - No. 13 December 1982

# Pp.5-33

## THE DISTRIBUTION AND POPULATION STATUS OF THE LARGER MAMMALS IN KAOKOLAND, SOUTH WEST AFRICA/NAMIBIA

DIBLIOTEEK LIBRARY P.J. VILJOEN Eugène Marais Chair of Wildlife Management, University of Pretoria (With 19 figures)

(Manuscrip! received 20 January 1982)

#### ABSTRACT

The distribution and status of the 36 larger mammal species in Kaokoland, South West Africa are given. The results are based on aerial and ground surveys conducted between 1975 and 1977. Of the 36 species, two are regarded as extinct and seven endangered. It is recommended that for future assessment of trends, aerial surveys be conducted towards the end of the rainy season. It is proposed that the environment and animals in western Kaokoland be regarded as a national asset of South West Africa with the highest conservation priority

#### CONTENTS

1.	Introduction	7
П.	Study area	7
ш.	Methods	8
IV.	Results	12
	1 Vervet Monkey Cercopithecus pygerythrus.	12
	2 Chacma Baboon Papio ursinus.	13
	3 Pangolin Manis temminckii	13
	4 Porcupine Hystrix africaeaustralis.	13
	5 Black-backed Jackal Canis mesomelas	13

293 A

Cimbebasia



FIGURE 8: The distribution of the Burchell's zebra, Equus burchellii antiquorum in Kaokoland during 1977.

total of 1 200 to 2 000 for the whole territory, Joubert (1973) reported 360, and Joubert & Mostert (1975) estimated 300 Hartmann zebras.

FAMILY RHINOCEROTIDAE

Subfamily Dicerorhininae

Diceros bicornis (Linnaeus), 1758 Hooked-lipped Rhinoceros

This rhinoceros is today restricted to the western region and southeastern corner of Kaokoland (fig. 10). In 1975, individual rhinoceroses could still be found at Otuzema, Ekoto and the Heowa Valley in the east. However, in 1977 no sign of these animals could be found. In fact, at nearly all the localities in the east, as mentioned by Owen-Smith (1970) and Joubert (1971a), the rhinoceroses have disappeared. The home ranges of the rhinoceroses in Kaokoland cover vast areas (Joubert & Eloff, 1971). Individual recognizable rhinoceroses were observed at localities up to 100 km apart. This leads to a misconception in the sense that it seems as if there are far more rhinoceroses in Kaokoland, than in reality. Through careful annotation of identifiable individuals, only 12 different rhinoceroses could be recognized in Kaokoland during the present study. Joubert & Mostert (1975) estimated that there were 30 in Kaokoland but it is doubtful that more than 20 rhinoceroses were left in 1977.

The hooked-lipped rhinoceros never occurred in

large numbers in Kaokoland. Shortridge (1934) estimated only 40 to 80 between the Ugab River and the Kunene River. In 1967 Joubert (1971 *a*) reported 25 rhinoceroses for the territory and Owen-Smith (1970) estimated 150. During the study of Owen-Smith (1970) and Joubert (1971 *a*), rhinoceros could still be found at a number of localities in the east, but since then their distribution has become severely reduced. They showed a negative population growth. No calves survived during the study period. This species is regarded to be endangered in Kaokoland.

## ORDER ARTIODACTYLA

### FAMILY SUIDAE Subfamily Suinae

#### Phacochoerus aethiopicus (Pallas), 1766 Warthog

Warthog was recorded from the Beesvlakte where they were common, north and east of Otjikowares, and a single observation in the Heowa Valley (fig. 11). This more or less corresponds to Shortridge's (1934) observations namely that warthog were scarce but widespread in the northern areas and that signs were found in the south, but none in the west. Owen-Smith (1970) found warthog in the eastern sandveld, near Ehomba and in the Heowa Valley, whereas Joubert



FIGURE 9: The distribution of the Hartmann zebra, Equus zebra hartmannae in Kaokoland during 1977.

& Mostert (1975) recorded them only from the eastern sandveld, near Otjovasandu. Although warthog is scarce in Kaokoland, their status appears to be unchanged when compared to earlier accounts.

#### FAMILY HIPPOPOTAMIDAE

Hippopotamus amphibius Linnaeus, 1758

Hippopotamus

According to sightings and spoor, a maximum of four to eight hippopotami occurred at Enyandi and the Epupa Falls in the Kunene River during 1975. However, in 1977 no signs of hippopotamus could be found anywhere in the Kunene River. It is possible that there are still individuals left on some of the small islands in the river, but for all practical purposes, the hippopotamus can be regarded as extinct in Kaokoland. Their numbers were never high in the past. Shortridge (1934) estimated a total of 12 in the Kunene River, west of Ruacana. Owen-Smith (1970) recorded 10 to 15 and Joubert & Mostert (1975) estimated four to six.



FIGURE 10: The distribution of the hookea-lipped rhinoceres, *Diceros bicornis* in Kaokoland during 1977. Rings indicate single observations in 1975.

- BOTHMA, J. du P. & NEL, J.A.J.
  - 1980: Winter food and foraging behaviour of the aardwolf Proteles cristatus in the Namib-Naukluft Park. Madogua 12: 141-149.
- COATON, W.G.H.
  - 1948: The harvester termite problem in South Africa. Bull. Dep. Agric. For. Un.S. Afr. (Ent. Ser. 25) 292: 1-38.
- COOPER, R.L. & SKINNER, J.D.
  - 1979: Importance of termites in the diet of the aardwolf Proteles cristatus in South Africa. S. Afr. J. Zool. 14:5-8.
- DE VILLIERS, P.A.
- 1975: Lugsensus Kaokoland Unpublished report. Department of Development and Cooperation.

DIVISION OF VETERINARY SERVICES, S.W.A.

1977: Unpublished Annual report,

- ELOFF, F.C. BOTHMA, J. du P., THERON, G.K. &
- VAN RIET, W.
  - 1927: Meesteiplan vir die bewaring, bestuur en benutting van natuurreservate in Damaraland en Kaokoland. Part I. Publs. Univ. Pretoria.
- FISCHER, A.
  - 1936: Menschen und Tiere in Sudwestafrika. Berlin. Safari-Verlag,
- GAERDES, J.
  - 1965: The impala of South West Africa. Afr. wild Life 9: 109-145.
- GH-SS, W.
  - 1971: Eine vorlaufige Vegetationskarte von Südwestafrika. Dinteria 4: 1-114.
- GREEN, L.G.
  - 1952: Lords of the last frontier. Cape Town .: Timmins.
- JOUBERT, E.
  - 1971a: The past and present distribution and status of the black rhinoceros Discros bicornis in South West Africa, Madoqua (1) No 4: 33-43.
- JOUBERT, E.
  - 1971b: Observations on the habitat preferences and population dynamics of the black-faced impala. Acpreters peters Bocage, 1875 in South West Alrica. Madagua (1) No.3, 55-65.
- JOUBERT, E
  - 1972: Voorgestelde Damaraland Wildham, Unpublished report Department of Agrealture and Nature Conservation of South West Africa.
- JOUBERT, E
  - 1973: Habitat preference, distribution and status of the Hartmann zebra Equity zebra hartmannae in South West Misca Madoqua (1) No 7:5-15.
- JOUBERT, F. & FLOEF, F.C.
  - 1971: Notes on the ecology and behaviour of the black rhinoectos, *Diceros bicornis* Linn, 1758, in South West Africa, *Mudoqua* (1) No 3: 5-53.
- JOUBERT, E. & MOSTERT P.K.N.
  - 1975: Distribution patterns and status of some manimals in South West Africa. Madoqua 9:5-44.

- KLINGEL, H 1969: Reproductio
  - 1969: Reproduction in the plains zebra Equus burchelli: behaviour and ecological factors. J. Reprod. Fert. Suppl. 6: 339-345
- LOXTON, R.F., HUNTING & ASSOCIATES. 1974: Report on a reconnaisance survey of the Natural Recources of Kaokoland. Report, Department of Development and Cooperation R.S. A
- MALAN, J.S. & OWEN-SMITH, G.L. 1974: The ethnobotany of Kaokoland. *Cimbebasia* (B)2: 131-138
- ODENDAA1, F.H. 1964: Commission of enquiry into S.W. 4. affairs, R.P. 12. Pretoria: Government Printers.
- OWEN-SMITH, G.L.
  - 1970: The Kaokoveld An ecological base for future development and planning. Pinetown.
- ROBERTS, A
  - 1951: The Mammals of South Africa. Johannesburg: Central News Agency.
- SHORTRIDGE, G.C. 1934: The Mammals of South West Africa. 1, 2, London: Henemann
- SMITHERS, R.H.N.
  - 1971: The Mammals of Botswana. Mem. natn. Mus. Rhod, No 4: 1-340.
- STUART, C.T.
  - 1980: The distribution and status of Manis temmineki Smuts, 1832 (Pholidota: Manidae). Saugetierkundliche Mitteilungen 28: 123-129.
- SWANEPOLL P., SMITHERS, R.H.N. & RAUTENBACH, I.L. 1980: A checklish and numbering system of the extant mammals of the Southern African subregion. Ann Transs. Mas. 32: 155-196.

SWART, P.S.

- 1967: New data on the black-faced impala (Aepyceros melampus peter i Bocage). Cimbebasia No 20: 1-18.
- TINLEY, K.I
  - 1969: Dik dik Madiozia kuki in South West Africa. Notes on distribution, ecology and behaviour. Madioqua No 1: 7-33.
- TINEFY, K.L.
- 1971 I tosha and the Kaekoveld. The case for saving Utesha, Atv. o.b11 (fc, Suppl. 25: 16).
- VILJOEN, P.J.
  - 1980: Veldtipes, verspreiding van die groter soogdiere, en enkele aspekte van die ekologie van Kuokoland, M.Sc. Thesis, University of Pretoria.

VON MOLTKE, J

1943: Jagkonings Cape Fown: Nasionale Pers Bpk.