

A NOTE ON THE OCCURRENCE OF BAT-EARED  
FOX *OTOCYON MEGALOTIS MEGALOTIS*  
(DESMAREST) IN THE KRUGER NATIONAL PARK

by

U. DE V. PIENAAR\*

During the intensive survey which preceded the publication of the check-list of the large mammals of the Kruger Park no evidence whatsoever could be found of the occurrence of the bat-eared fox *Otocyon megalotis megalotis* (Desmarest) within the present borders of the Kruger Park (Pienaar 1963). All available records in our archives were thoroughly scrutinised and previous check-lists by Stevenson-Hamilton and others were consulted. Exhaustive inquiries were also made amongst all European and Bantu rangers (past and present), but despite all these efforts not even a doubtful record was found indicating the possible presence of bat-eared foxes in any portion of the Kruger Park.

Coetzee (1967) lists the present distribution of *O. megalotis* as follows: "Becoming rare in farming areas but previously found throughout the semi-arid parts of southern Africa: Karoo (though rare in the eastern districts), Little Namaqualand, Orange Free State, southwestern Transvaal, throughout northern Cape Province and Botswana, South West Africa (not yet recorded from the Namib desert, but known in the pro-Namib regions), southern Angola and possibly the western Rhodesian border areas [Wankie, and Shashi-Umzingwani block]. Ansell (1960) mentions sight records in the southern Barotseland districts of Zambia [southern race]. Also occurs from Tanzania (mainland) northwards to southern Sudan [the race *virgatus*], Ethiopia and Somalia [the race *canescens*]."

No mention is made of bat-eared foxes ever having been recorded from the northern or north-eastern regions of the Transvaal, south-eastern Rhodesia and the adjoining portions of Mozambique.

When, during a survey of the Botswana mammalian fauna by Smithers in 1966, the author was sounded out on the possibility of these semi-diurnal carnivores occurring in the northern regions of the Kruger Park it was with a fair degree of confidence that their presence here could be denied. The reason for Smithers' approach was two unrelated and rather unbelievable reports, received from very reliable sources, of bat-eared foxes which were seen (during July 1966) in the Buffalo bend on the Nuanetsi river and in the Gona-re-zhou area, in the extreme south-

\*Nature Conservator, Kruger National Park, Skukuza

eastern region of Rhodesia. Up till that time the known distribution of these animals in Rhodesia covered, as could be expected, the extreme western fringes of the country bordering on Botswana, i.e. the Wankie Game Reserve in the north and the Shashi- Umzingwane-block in the south (Smithers, 1966 a, b, 1968).

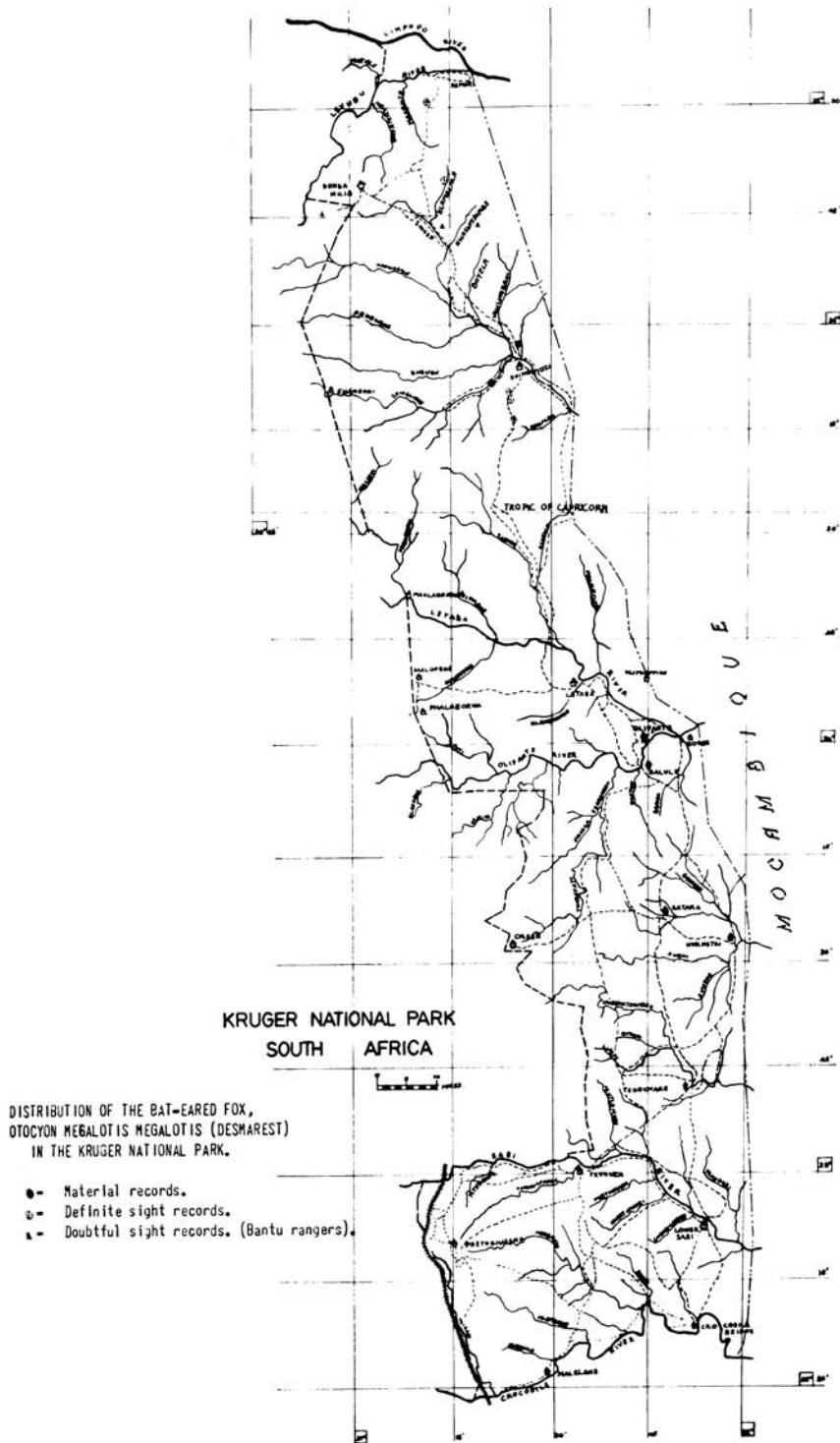
Considering all the available evidence on the distribution of bat-eared foxes in Southern Africa within recent times, it therefore came as a considerable surprise when one of the Kruger Park rangers, Mr. D. Swart, reported seeing on the 4 March, 1967 a family group of 6 of these animals during the night along the main road, about 9 miles south of Shingwedzi. Unfortunately, Mr. Swart was not able to collect a specimen, and needless to say, there was considerable scepticism in local circles when the report was made. When District Ranger J. Kloppers also reported, only three months later (17.6.67), that he sighted two animals at Nkowakulu, which, according to his description could only be bat-eared foxes, the scepticism changed to excitement and all hands were alerted to obtain a specimen.

The original group of six were again seen near the Kokodzi-turnoff early in 1969, but again we were frustrated in not being able to obtain a specimen.

At long last, on the 16 May, Ranger M. English, travelling home one night, came across a group of 6 bat-eared foxes along the 42 mile loop road about 10 miles from Shingwedzi, and managed to collect a young adult female. The skin and skull were carefully preserved, and it was now possible to confirm for the first time that bat-eared foxes did, in fact occur within the boundaries of the Kruger Park. Subsequently, another pair was seen at Dzombo windmill, south of Shingwedzi on the 18 July 1969, as well as a single animal at Hlamalala dam on the 30 June. On the 10 of September we obtained our second material record when an adult male bat-eared fox was run over by a transport vehicle half-a-mile north of Manzemba spruit, on the main road from Shingwedzi to Punda Milia.

The known distribution of *Otocyon megalotis* in the Kruger Park is depicted on the map. A significant feature of all the records (both visual and material) of *Otocyon* in the park to date is that all were obtained at night, except the Hlamalala sighting which was made during the day. The bat-eared fox is known as a semi-diurnal animal throughout most of its arid western range, and the fact that the Kruger Park specimens are mainly abroad at night may be an indication of protective behaviour of new colonists in strange surroundings.

Interesting in this respect is that the local Tsonga names for the bat-eared fox is "Hlohlwe" or "Tsanganya". The Tsonga proverb "Hlohlwe ku vindzuka" means to get up very early. The name "Hlohlwe" therefore implies that one has to rise very early in order to see one of these animals. This also tends to confirm their nocturnal habits in this extreme eastern sector of their range.



That bat-eared foxes could have escaped the notice of all European and Bantu rangers since the earliest days of the Park's existence, i.e. for more than 60 years, appears highly unlikely, and the available evidence in the Kruger Park, as well as the south-eastern Rhodesian records, would seem to indicate a recent invasion from the west. This recent eastward extension of the range of an arid western faunal element is not only highly interesting but is also acceptable when viewed in the light of corroborating findings regarding other western faunal and floral elements which have been found in the extreme north-eastern regions of the Kruger Park.

The wide, low-lying and arid Limpopo valley is both geographically and climatologically suitable as a corridor for the eastward migration of desert savannah elements from the west.

Arid western floral elements which have been recorded in the extreme northern and north-eastern sandveld areas of the Park, mainly in the Punda Milia section and in the unique Nwambiya sandveld south of Pafuri, include such species as *Baphia massaiensis* subsp. *obovata*, *Pterocarpus antunesii*, *Guibourtia conjugata*, *Dalbergia nitidula*, *Commiphora tenuipetiolata*, *Sesamothamnus lugardii*, *Brachylaena huillensis*, *Diplorrhynchus condylocarpon*, *Ficus brachylepis*, *Xylopia odoratissima*, *Boscia rehmanniana*, *Combretum engleri*, *Pseudolachnostylis maprouneifolia*, *Salvadora persica*, *Aloe rubrolutea* and *Stipagrostis uniphumis* var. *neesii*. Many of these species are also found in the sandveld areas of the northern Limpopo valley in Rhodesia, and in the adjoining sandveld regions of Mozambique. Faunal elements from the west, which may have penetrated as far east as the northern Kruger Park and Gona-re-zhou area of Rhodesia along this corridor, include such species as the sand tampan *Ornithodoros savignyi*, the land snail *Xeroce-rastus burchelli*, the frog *Phrynobatrachus ukingensis mababiensis*, the western sand snakes *Psammophis sibilans trinasalis* and *P. angolensis* and the fairy shrimp *Branchinellites ondonguae*.

Significant also in this context is the occurrence in the southern Limpopo valley of the lesser gerbille, *Gerbillus paeba*, the horned adder *Bitis caudalis* and the whistling gecko *Ptenopus garrulus* as far east as Chipise, and also of the only naturally occurring population of gemsbuck *Oryx gazella* on the farm Langjan (along the Brak river, south-west of Messina).

In view of the formidable faunal barrier presented by the Levubu river, along the erstwhile northern border of the Park, the direction of invasion of the Park by bat-eared foxes would appear to be from the east, via Mozambique. That this is more than an intriguing possibility is borne out by the fact that records of *Otocyon* have definitely been established for the Gona-re-zhou and Buffalo bend areas of south-eastern Rhodesia (Smithers, 1966 a) and also, more recently, in the more open sandveld savannahs of Mozambique north and west of Mapai (Tinley, 1969).

This recent eastern extension of the range of *Otocyon* has not only been dramatic in its onset and progress, but is all the more remarkable in the

face of the very real barriers of human settlement and cultivated areas which had to be transgressed.

#### REFERENCES

- ANSELL, W. F. H. 1960. Mammals of Northern Rhodesia. *Lusaka: Govt. Printer.*
- COETZEE, C. G. 1967. Carnivora (excluding the family Felidae). In: J. Meester (Ed.): *Smithsonian Inst. Prelim. Ident. Manual Afr. Mammals* (7): 1-70.
- SMITHERS, R. H. N. 1966a. Personal Communications.
- SMITHERS, R. H. N. 1966b. The Mammals of Rhodesia, Zambia and Malawi. *London: Collins.*
- SMITHERS, R. H. N. 1968. A check list and atlas of the mammals of Botswana. Trustees of the Nat. Museums of Rhodesia.
- TINLEY, K. 1969. Personal Communication.
- PIENAAR, U. DE V. 1963. The large mammals of the Kruger National Park—their distribution and present-day status. *Koedoe* (6): 1-36.