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### Field Report

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## Persecution of Rüppell's fox in central Saudi Arabia

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Peter L. Cunningham

King Khalid Wildlife Research Centre, Thumamah, P. O. Box 61681, Riyadh, Kingdom of Saudi Arabia and the Zoological Society of London.

Email: [pckkwrc@yahoo.co.uk](mailto:pckkwrc@yahoo.co.uk)

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### Abstract

Sightings of Rüppell's fox hanging from road signs in central Saudi Arabia probably indicate persecution by humans of this species. This is viewed as an added anthropogenic threat to the survival of the species from the Arabian Peninsula.

### Introduction

Rüppell's fox *Vulpes rueppellii* Schinz, 1825 is a small nocturnal arid-adapted fox that occurs throughout the arid steppe and desert regions of the Arabian Peninsula (Gasperetti et al. 1985; Kingdon 1990; Nader 1990; Harrison and Bates 1991; Duckworth 1996; Cuzin and Lénain 2004; Geffen et al. 2004). Although with a widespread distribution, very little is still known about the species, especially population trends and threats, and it is currently listed as *Least Concern* (LC) by the IUCN (IUCN 2008) and is not listed by CITES (2008).

According to the IUCN (IUCN 2007) there is currently no effective legislation for the protection of native carnivores in Saudi Arabia and it is not illegal to shoot, poison or trap mammalian carnivores. However, hunting laws (Decree No. 457 and Decrees M/22, No.128) restrict such activities within the National Commission for Wildlife and Conservation Development protected areas network although none have been established with the protection of Rüppell's foxes listed as the main objective (IUCN 2007).

The aim of this paper is to include persecution by humans as a potential additional threat to Rüppell's fox in Saudi Arabia by providing evidence, albeit anecdotal, of such persecution from central Saudi Arabia.

### Results

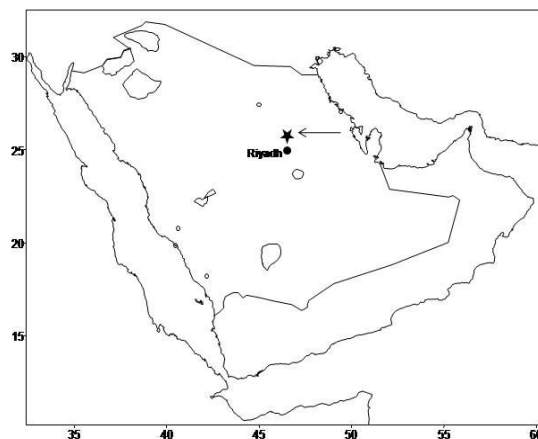
On 9 and 15 July 2008 I saw one and three adult Rüppell's foxes hanging by the neck

from vehicle signposts approximately 50km north of Riyadh, close to the King Khalid International Airport (Figures 1 and 2). The area is used by local youths for informal recreation as an area for dune bashing with 4x4 vehicles and quad bikes (Figure 3). The vegetation is sparse in the immediate area, consisting of dwarf shrubs (e.g. *Haloxylon salicornicum* and *Rhanterium epapposum*) and tufts of perennial grasses (e.g. *Panicum turgidum* and *Lasiurus scindicus*) in the general vicinity. The landscape consists of an intruding dune belt (where the dune bashing takes place) with gravel plains to the west and east thereof and the Tuwaiq Escarpment, a remnant Jurassic limestone massif, a few kilometres further eastwards (Child and Grainger 1990).

The first carcass remained on display until 15 July, together with the other three individuals, and all were removed, probably by municipal workers who clean the area, by 26 July 2008. All the carcasses displayed typical vehicle impact with crushed and/or flattened chests/abdomens, large patches of missing hair and covered in dried blood. No signs of death by alternative means - i.e. shooting and or bite marks - were observed.

## Discussion

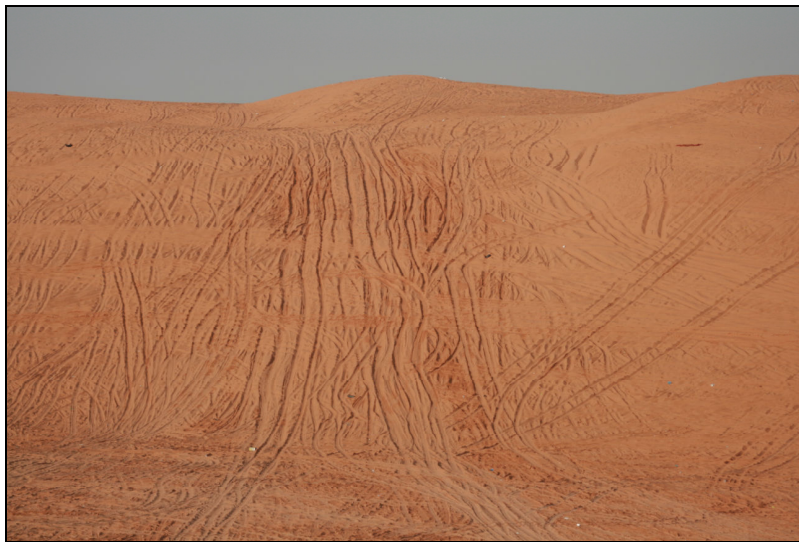
These Rüppell's foxes displayed from vehicle signposts confirm active persecution of the species in central Saudi Arabia. Such displays of predators (e.g. leopard *Panthera pardus*, wolf *Canis lupus*, striped hyena *Hyaena hyaena*) actively killed by humans are a common occurrence in the Peninsula (Nader and Büttiker 1980; Duckworth 1996; Monro 1997; Sher Shah 2007). It could not be determined if the foxes were accidentally killed whilst dune bashing in the immediate area, killed elsewhere and displayed here or caught elsewhere and released for active pursuit and killed locally. The accidental killing of Rüppell's foxes in the area is a possibility, although unlikely as this area is extremely well travelled with hardly any natural vegetation remaining in the "recreational" dune area (Figure 3). Accidental roadkill are also ruled out as this has not previously been viewed as a threat to the species (Cuzin and Lenain 2004) with the visible display of the carcasses being similar to that documented for other predators actively and not accidentally killed by humans.



**Figure 1.** Location of the site where the Rüppell's foxes were observed killed north of Riyadh in Saudi Arabia.



**Figure 2.** Rüppell's fox hanging from a signpost north of Riyadh in central Saudi Arabia.



**Figure 3.** The immediate area where the informal recreation - dune bashing - takes place mainly by local youths.

Settled camel *Camelus dromedarius* and goat farms, numerous roving stray dogs with no known den sites from the immediate area also

make the presence of Rüppell's foxes unlikely in the immediate vicinity. The pursuit and active killing for "sport", albeit speculation

only, is supported by the fact that dogs were viewed being chased by vehicles and quad bikes in the same area.

The status of Rüppell's fox from Saudi Arabia is unknown, but it would be reasonable to assume that they are widespread throughout suitable habitat including the Rub al Khali (Empty Quarter) as records indicate. As any other carnivore they would be indiscriminately persecuted as livestock predators or included as collateral damage during the poisoning of carcasses targeting other predators, a major concern for the species. Although the IUCN classifies Rüppell's fox as *Least Concern* (IUCN 2008) their status in neighbouring countries is classified as *Endangered* in Oman (Fisher 1999) and *Vulnerable* in the United Arab Emirates (Hornby 1996; Cunningham 2004) and *Endangered* in the Abu Dhabi Emirate, with a perceived notion of a steady decline in numbers in the UAE (Drew and Tourenq 2005).

Previously published threats for Rüppell's fox include droughts and overgrazing with associated habitat loss, fragmentation and degradation, competition with red fox *Vulpes vulpes arabica* which are perceived to be increasing in numbers due to their commensalism with humans, competition with domestic dogs and cats, canine diseases and associated parasites, collateral damage whilst targeting other carnivores by poisoning and trapping and occasionally for food (Gasperetti et al. 1985; Yom-Tov and Mendelssohn 1988; Ginsberg and Macdonald 1990; Kingdon 1990; Drew and Tourenq 2005; Murdoch et al. 2007).

This added threat of what seems to be direct persecution and killing of Rüppell's fox as problem animal or for "sport" in Saudi Arabia - although only viewed on these two occasions - is disconcerting, especially for a species perceived to be in decline throughout its range and of which very little is known. Environmental awareness and education is imperative to ensure the survival of species, especially carnivores which are often instinctively viewed as pests or threats.

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## References

Child, G. and Grainger, J. 1990. *A System Plan for Protected Areas for Wildlife Conservation and Sustainable Rural development in Saudi Arabia* - Appendix II. NCWCD, Riyadh, 335 pp.

CITES 2008. CITES Appendices I, II and III. <http://www.cites.org>

Cunningham, P.L. 2004. Checklist and status of the terrestrial mammals from the United Arab Emirates. *Zoology in the Middle East* 33: 7-20.

Cuzin, F. and Lenain, D.M. 2004. [Rüppell's fox \*Vulpes rueppellii\* Schinz, 1825](#). In: Sillero-Zubiri, C., Hoffmann, M. and MacDonald, D.W. 2004 (eds.) *Canids: Foxes, Wolves, Jackals and dogs* - 2004. Status Survey and Conservation Action Plan. IUCN/SSC Canid Specialist Group.

Drew, C. and Tourenq, C. 2005. The red list of terrestrial mammalian species of the Abu Dhabi Emirate. Unpublished internal Report, Environmental Agency of Abu Dhabi, Abu Dhabi, UAE.

Duckworth, W. 1996. Land mammals of Abu Dhabi. In: Osborne, P.E. (ed.) 1996. *Desert ecology of Abu Dhabi - a review and recent studies*. Pisces Publications, Newbury, UK. Pp. 236.

Gasperetti, J., Harrison, D.L. and Büttiker, W. 1985. The carnivore of Arabia. *Fauna of Saudi Arabia* 7: 397-461.

Fisher, M. 1999. The conservation status of the mammals of Oman: A preliminary Red List. In: M. Fisher, S. A. Ghazanfar and A. Spalton (Eds.), *The Natural History of Oman*. A Festschrift for Michael Gallagher. Leiden, 206 pp.

Ginsberg, J. R. and Macdonald, D. W. 1990. *Foxes, Wolves, Jackals and Dogs: An Action Plan for the Conservation of Canids*. IUCN, Gland, 116 pp.

Harrison, D.L. and Bates, P.J.J. 1991. *The Mammals of Arabia*. 2<sup>nd</sup> Edition. Sevenoaks, UK. 354 pp.

Hornby, R. 1996. Red list of mammals for the United Arab Emirates. *Tribulus* 6.1:13-14.

IUCN 2007. 2007 IUCN Red List of Threatened Species. <http://www.iucnredlist.org>

IUCN 2008. 2008 IUCN Red List of Threatened Species. <http://www.iucnredlist.org>

Kingdon, J. 1990. *Arabian Mammals*. A Natural History. – London, UK. 279 pp.

Monro, L. 1997. Born free – from Arabia to nowhere. A look at the Arabian leopard. *Living in the Gulf* October 1997: 507-511.

Murdoch, J.D., Drew, C., Barcelo Lanes, I. and Tourenq, C. 2007. [Rüppell's foxes in Al Dhafra, United Arab Emirates](#). *Canid News* 10.1: 1-6.

Nader, I.A. 1990. Checklist of the Mammals of Arabia. *Fauna of Saudi Arabia* 11: 329–381, Basle and Jeddah.

Nader, I.A. and Büttiker, W. 1980. Records of the Arabian wolf, *Canis lupus arabs* Pocock, 1934, from Saudi Arabia. *Fauna of Saudi Arabia* 2: 405-411.

Sher Shah, M. 2007. First record of Arabian wolf *Canis lupus arabs* in Saja/Umm Ar-Rimth Protected Area. Unpublished Annual Report, National Wildlife Research Centre, Taif, Saudi Arabia.

Yom-Tov, Y. and Mendelssohn, H. 1988. Changes in the distribution and abundance of vertebrates in Israel during the 20th century. In: Y. Yom-Tov and E. Tchernov (eds.). *The zoogeography of Israel*. Dr. W. Junk Publishers, The Netherlands.

**Peter Cunningham** currently works as an ecologist for the Zoological Society of London (ZSL) at the King Khalid Wildlife Research Centre at Thumamah, north of Riyadh in Saudi Arabia, studying the feeding ecology of reem (Sand gazelle *Gazella subgutturosa marica*) in protected areas in Saudi Arabia as well as assisting with the management of the species. Previously he lived and worked in the United Arab Emirates and published extensively on a variety of topics from the region. Most recently he was Head of the Nature Conservation Department at the Polytechnic of Namibia in Windhoek, Namibia.