

7.2 Pale fox
Vulpes pallida (Cretzschmar, 1827)
 Data Deficient (2004).

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Other names

Arabic: tsaaleb; **English:** pallid fox, African sand fox;
French: renard pâle; **German:** blassfuchs; **Spanish:** zorro pálido.

Taxonomy

Canis pallidus Cretzschmar, 1827. In Rüppell, Atlas Reise Nordl. Afr., Zool., Säugeth. (dated 1826), pp. 33, pl. 11. Type locality: “Kordofan” [Sudan].

Thomas (1918) associated *Vulpes pallida* with Rüppell’s fox (*V. rueppellii*) and the fennec fox (*V. zerda*). Clutton-Brock *et al.* (1976) support this grouping and suggest that these desert foxes are also closely related to the Indian fox (*V. bengalensis*) and the Cape fox (*V. chama*).

Chromosome number not known.

Description

A small, very pale fox with longish legs and large ears (Table 7.2.1). Pale face, elongated muzzle with relatively long whiskers, and a black eye-ring. Large ears, white inside and rufous-brown on the outer surface. Body creamy-white to sandy fawn, relatively thin coat, back sometimes flecked with black or rufous, with darker mid-dorsal line. Flanks paler than dorsal pelage, merging into white or buffy-white undersides, and legs rufous. Long, bushy tail, reddish brown with conspicuous black tip and a dark patch above tail gland. Females have three pairs of mammae. The skull is small with a relatively short maxillary region, and well-developed upper molars in relation to relatively weak carnassial teeth (Clutton-Brock *et al.* 1976). Bullae of the pale fox are slightly larger and the nasals appreciably longer than in Rüppell’s fox (Rosevear 1974). Dental formula is 3/3-1/1-4/4-2/3=42.

Table 7.2.1. Combined body measurements for the pale fox from across the range (Dorst and Dandelot 1970; Rosevear 1974; Happold 1987).

HB	380–550mm
T	230–290mm
HF	100mm
E	65–72mm
WT	2.0–3.6kg

Subspecies Five races have been described, four of which are listed here (following Coetzee 1977). According to Rosevear (1974), variation may be clinal.

- *V. p. pallida* (Sudan, from Kordofan to Dongola)
- *V. p. edwardsi* (Mali, Senegal)
- *V. p. harterti* (northern Nigeria northwards to Air in Niger, and westwards to Burkina Faso)
- *V. p. oertzeni* (Nigeria, northern Cameroon and Chad to Libya in the north and Darfur province of Sudan in the south).

Similar species Red fox (*Vulpes vulpes*): larger, with shorter legs and ears. Rüppell’s fox (*V. rueppellii*): ears larger; longer tail without black tip (usually white); carnassials 1–3mm longer. Fennec fox (*V. zerda*): ears much larger and thicker, longer coat.

Current distribution

The pale fox is distributed in the semi-arid Sahelian region of Africa bordering the Sahara, from Mauritania and Senegal through Nigeria, Cameroon and Chad to the Red Sea (Figure 7.2.1). Southern limit of geographical range extends into northern Guinean savannah zones.

Range countries Algeria(?), Burkina Faso, Cameroon, Central African Republic (?), Chad, Eritrea, Ethiopia, Gambia, Libya, Mali, Mauritania, Niger, Nigeria, Senegal, Somalia (?), Sudan (Lavauden 1926; Rosevear 1974;

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Figure 7.2.1. Current distribution of the pale fox.

Pale fox, age and sex unknown.



Happold 1987; Yalden *et al.* 1980, 1996; Granjon *et al.* 1995; Grubb *et al.* 1998).

Relative abundance

Widespread and present throughout range but in most parts locally rare. It is one of the least known canid species.

Estimated populations/relative abundance and population trends There is no detailed information on its abundance or status.

Habitat

Typically inhabiting very dry sandy and stony sub-Saharan desert and semi-desert areas, but extending to some extent southwards into moister Guinean savannahs. Therefore, they have a very extensive distribution within an unstable and fluctuating ecological band lying between true desert and the Guinean savannahs. May occur near human habitation and cultivated fields where food is more readily available than in natural habitats (Rosevear 1974).

Food and foraging behaviour

Food Well-developed molars suggest pale foxes are essentially herbivorous, eating mainly berries, wild fruit such as melons, and vegetable matter. They also feed on small rodents, ground-nesting birds, small reptiles and invertebrates (Dorst and Dandelot 1970; Kingdon 1997).

Foraging behaviour Unknown.

Damage to livestock or game: Unlikely, although they are known to kill domestic birds (Rosevear 1974).

Adaptations

Pale foxes tolerate heat well. They can survive lengthy hot, dry seasons, presumably on fruits and the residual moisture of their prey, although they are unable to bear completely waterless conditions (Kingdon 1997).

Social behaviour

Little is known of their habits, but they are gregarious and have been observed in pairs and small family parties (Dorst and Dandelot 1970; Rosevear 1974; Coetzee 1977). In captivity, a group of one female and two males got along amicably (Bueler 1973). They are active from dusk till dawn, resting during the day in extensive burrows, occupied by several individuals (Coetzee 1977).

Reproduction and denning behaviour

Pale foxes dig extensive burrows, 2–3m deep and up to 15m in length, with inner chambers lined with dry vegetation, often under sandy tracks or in the neighbourhood of villages (Haltenorth and Diller 1980). Gestation is likely to be in the region of 7–8 weeks. A captive female gave birth to a litter of four in June (Bueler 1973). Gestation period

in captivity is 51–53 days. Three to six young are born; weaning takes six to eight weeks.

Competition

Unknown.

Mortality and pathogens

Unknown, but probably susceptible to predation by other desert carnivores and aerial predators and pathogens like rabies and canine distemper. Anderson (1902) mentioned skulls of the species found in the nest of a kite near Khartoum.

Longevity A captive animal lived to three years (Rosevear 1974), but it is likely that they live to at least twice this age.

Historical perspective

No information available.

Conservation status

Threats Unknown, although occasional persecution by chicken raiders may take place.

Commercial use None.

Occurrence in protected areas Likely to occur in a number of protected areas throughout the species' range, but no reliable information available.

Protection status CITES – not listed.

Current legal protection No information available.

Conservation measures taken No information available, although it is unlikely that any proactive measures have been taken by any of the range countries.

Occurrence in captivity

There are no pale foxes in captivity in collections reporting to ISIS or the International Zoo Year Book. There have been no breeding records for the last decade.

Current or planned research projects

None known.

Gaps in knowledge

This is one of the least known canid species, and studies on distribution, status, basic biology and ecological requirements are needed.

Core literature

Coetzee 1977; Dorst and Dandelot 1970; Happold 1987; Kingdon 1997; Rosevear 1974.

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