

Canids in the southeastern Arabian Peninsula

At the request of the Arabian Leopard Trust, the authors undertook a vertebrate survey of the Hajar Mountains and the southern reaches of the Rus al Jibal that fall within the United Arab Emirates, from March to the middle of May 1995. Although the primary goal was to establish the current conservation status of the leopard (*Panthera pardus nimr*) in these mountains, the opportunity was taken to compile information on a wide variety of other mammals occurring here, as well as birds, reptiles, amphibians and fish.

Two canid species have previously been recorded from the mountain ranges and vicinity of the United Arab Emirates (UAE); the current survey discovered a third:

Arabian wolf	<i>Canis lupus arabs</i>
Arabian red fox	<i>Vulpes vulpes arabica</i>
Blanford's fox	<i>Vulpes cana cana</i> (new record)

The only other canid species occurring within the UAE is Rüppell's fox (*Vulpes rueppellii sabaea*) but this species is entirely restricted to sand areas. There are unsubstantiated records of the presence of the Asiatic, or common jackal (*Canis aureus*) but we obtained no information that would indicate that it occurs at the present time in the areas we surveyed.

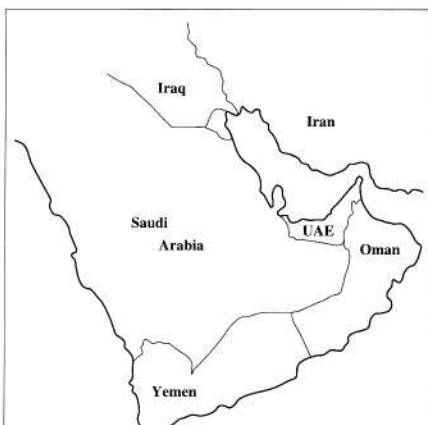


Figure 1. Location of the United Arab Emirates on the Arabian Peninsula.

Type	Exact locality (GPS)	Altitude	Habitat
Live capture	25°29'58"N 56°16'16"E	200 m	Steep mountain slopes; wadis
Hair sample; clear tracks	25°05'37"N 56°03'23"E	270 m	Rugged hills; narrow rocky valley
Droppings; tracks	25°58'58"N 56°10'31"E	480 m	Low ridges; above rocky wadi; ringed by higher ridges

Table 1. Locality details for Blanford's fox recorded in the UAE (see Figure 2).

Animal	Date	Head & Body	Tail	Hft	Ear	Scrotum
Male 1	17 / 03 24 / 03	440 mm	307	91	87	18
Male 2	19 / 03 24 / 03 25 / 03	455 mm	345	100	91	20
Female 1	20 / 03	340 mm	317	88	89	--

Table 2. Details of the three Blanford's foxes trapped, marked and released at Wadi Ziq, Emirate of Fujairah (UAE).

Blanford's Fox, *Vulpes cana*



The first records of the occurrence of the Blanford's fox from Arabia were noted in 1981, with animals being sighted and captured in Israel (Palestine) and Sinai (Egypt). It is doubtful that these were recent immigrants; a more likely explanation is that established populations were overlooked in an arid and relatively hostile environment (Ilani, 1983; Mendelsohn *et al.*, 1987; Geffen *et al.*, 1993). Two specimens of this species were caught at Jabal Samhan in the Dhofar of the Sultanate of Oman (Harrison & Bates, 1989), and a road casualty was recorded 40 km south-east of Biljurshi in Saudi Arabia. There is a photographic record from the nearby Jabal Shada (Harrison & Bates, 1991).

If one excludes the records from Israel (Palestine) and the Sinai (Egypt) then only four specimens of this small desert fox have been recorded from three localities in the actual Arabian Peninsular (see Geffen & Macdonald in Canid News 2, p. 24). The current survey live-trapped and photographed three individual Blanford's foxes at one location in the Hajar Mountains (UAE), located a hair sample and clear tracks of an animal that escaped from a live-trap at a second location and collected droppings at two other sites that

bore a close resemblance to those previously collected from trapped animals (see Fig. 1). Through an Arab-speaking colleague we were able to determine that this fox is known to tribesmen living in the Rus al Jibal mountains within the UAE, adjacent to and extending into the northernmost territory of the Sultan of Oman. They clearly distinguished between the Arabian red fox and this species, giving accurate descriptions, particularly mentioning its small size, black-tipped tail and the fact that it moved easily on the cliffs and in the boulder strewn upper reaches of the wadis. As with all mammalian carnivores occurring in the area, they are actively hunted by man.

Harrison and Bates (1991) stated that it was probable that Blanford's fox inhabits other montane areas in Arabia, but has yet to be recorded. The current records for south-eastern Arabia bear out this belief. It is our opinion that this small fox will be found to occur more or less continuously in the mountains bounding on the Indian Ocean and Red Sea seaboard of Arabia when more extensive trapping is undertaken. In addition, given the nature of the terrain in the zoologically poorly-explored Red Sea hills of Africa and the recent geological union of this continent and Arabia, there is a distinct possibility that Blanford's fox could be the continent's twelfth canid species!



Several points of interest were noted during the examination of these animals. In particular male 1, unlike typical Blandford's fox with a black-tipped tail, had a distinctive white tip to the tail but in all other respects was typical of the species. Male 1 and male 2 are illustrated in the photographs. The only female caught was lactating (6 mammae) and the area of the belly was largely naked of hair.

Both male foxes gave regular harsh screaming yaps when we approached the cages but the female did not call at any stage. Male 2 on each of the three releases gave a few short yip-calls after galting at the foot of a steep wadi cliff some 50 m from the trap, and at 100 m away in the opposite direction. On all three occasions male 2 followed exactly the same route after release, across the wadi bottom and up the facing cliff. Despite extensive searches no trace was found of the animal's resting site. Male 1 on both releases made for the same cliff as male 2 but after pausing briefly at its base, crept into a narrow cleft in the rock where it remained for several minutes before emerging to continue over the ridge. The only female trapped on release ran to the wadi bottom and moved up the bed in the opposite direction from that taken by the males on the total of five releases.

Only five positively identified Blandford's fox droppings were available for analysis; three were removed from the traps, two from a ridge close to the trapping locality. Feathers from quail

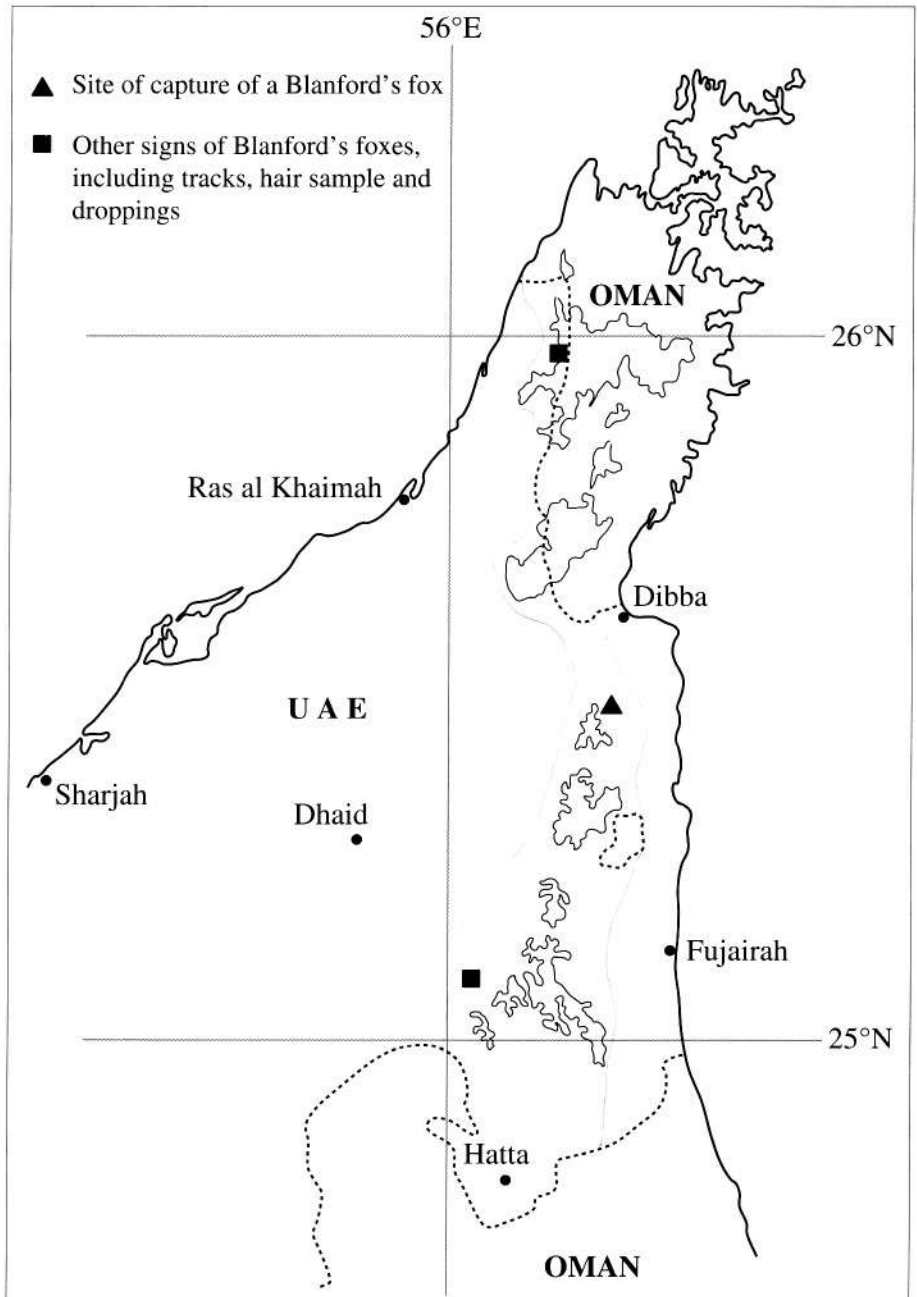


Figure 2. Location of Blandford's fox in the UAE.

Recent Blandford's fox publications:

GEFFEN, E., HEFNER, R., MACDONALD, D. W. & UCKO, M. (1992). Diet and foraging behaviour of Blandford's foxes, *Vulpes cana*, in Israel. *Journal of Mammalogy*, 73: 395-402.
 GEFFEN, E., HEFNER, R., MACDONALD, D. W. & UCKO, M. (1992). Habitat selection and home range in the Blandford's fox, *Vulpes cana*: compatibility with the resource dispersion hypothesis. *Oecologia*, 91: 75-81.
 GEFFEN, E., HEFNER, R., MACDONALD, D. W. & UCKO, M. (1992). Morphological adaptations and seasonal weight changes in the Blandford's fox, *Vulpes cana*. *Journal of Arid Environments*, 23: 287-292.
 GEFFEN, E. & MACDONALD, D. W. (1992). Small size and monogamy: spatial organization of Blandford's foxes, *Vulpes cana*. *Animal Behaviour*, 44: 1123-1130.
 GEFFEN, E., HEFNER, R., MACDONALD, D. W. & UCKO, M. (1993). Biotope and distribution of Blandford's fox. *Oryx*, 27(2): 104-108.
 GEFFEN, E. & MACDONALD, D. W. (1993). Activity and movement patterns of Blandford's foxes. *Journal of Mammalogy*, 74: 455-463.

used as bait were present in two droppings but the only other food remains in all five samples were the skins and pips of the fruit of the sidr tree (*Ziziphus spina-christi*). Several of these trees were located in close proximity to the trap-site and most were laden with fruit. The foxes almost certainly harvest these fruits from the ground. Densities of potential prey species, such as rodents, reptiles and birds within the study area were extremely low and this could account

for foxes relying on a temporarily abundant food resource. Numbers of invertebrates were also surprisingly meagre at the time of the study, but numbers of grasshoppers, tenebrionid beetles and lepidopterans increased dramatically shortly after the onset of the rains when we left the area. Two droppings collected at the third locality given in the table contained numerous seeds from the fruit *Ficus salicifolia*. [See box of recent literature concerning Blandford's fox]

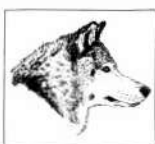


Figure 3. Male 2 Blanford's fox, showing normal black tail tip.



Figure 4. Male 1 Blanford's fox, showing aberrant white tail tip.

Arabian wolf, *Canis lupus arabs*



Harrison and Bates (1991) record the only confirmed Arabian wolf from the mountainous area of the UAE, from

Dibba, lying adjacent to the northern Omani territory (25°43'N; 56°15'E). During the course of the current survey we found no indications of the presence of the Arabian wolf in the mountains of north-eastern UAE, although from interviews it became obvious that it had occurred here in the recent past. Despite the extensive nature of our survey it is possible that animals do still survive in the rugged mountain fastness, although it is rather unlikely that viable numbers of wolves remain. It is probable, however, that small numbers of wolves do survive in the northernmost Omani territories (Rus al Jibal), within the extensive system of deep wadis and gorges. This is also the area in which the last surviving population of Arabian leopard is centred in the UAE/Oman border region. If adequate protection is given to these predators and their natural prey species it is highly likely that they would repopulate the Hajar mountains to the south. The setting aside of montane sanctuaries would, however, be inadequate on its own since it is unlikely that either the wolf, or leopard for that matter, could be maintained in viable numbers within sanctuaries covering less than a few hundred square kilometres.

A number of recent reported sight-

ings of "wolves" appear to have been either of feral dogs, or wolf/dog hybrids, and in at least one case, an Arabian red fox. Hybridisation between domestic dogs and wolves could pose a serious threat to any attempts to conserve this, Arabia's largest canid.

Arabian red fox, *Vulpes vulpes arabica*



This is by far the most abundant and widespread of the canids occurring in the UAE, even in the montane

areas. During the course of this survey we found them at all the locations we checked, from Sharm in the western Al Hjjir al Gharbi foothills in the Sultanate of Oman, northwards through the Hajir Mountains (Shumayliyah) of the UAE and in the western reaches of the Rus al Jibal of northernmost Oman (sometimes referred to as the Musanda). There was little evidence of their presence in the higher mountains, or those wadis that penetrated deep into the mountain chains, but in the foothills and particularly in the vicinity of small rural settlements they occurred at the highest densities. In the latter case they appeared to be relying on waste discarded by peasant farming communities. Farmers complained that the species frequently raided their poultry and took very young goat kids, and as a result were extensively trapped and shot.

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Chris & Tilde Stuart

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