

## The Distribution and Status of *Felis caracal* Schreber, 1776

By Chris T. Stuart

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The paper reports the distribution of the Caracal, *Felis caracal*, over its entire range, based on published records as well as records from museum collections and the author's personal records. In Africa, the Caracal occurs around the margins of the Sahara and throughout the rest of the continent, excluding the tropical forests of West Africa and Zaire, and most of Natal and Zululand. In Asia, the total range of *F. caracal* includes from eastern Turkey, Israel, Arabian Peninsula, Syria, Iraq, Iran, the deserts of Turkmenia (USSR) and in the vicinity of the Sea of Aral, Afghanistan, Baluchistan (Pakistan), to the northern and central areas of India.

It can be stated that the Caracal is secure, for the foreseeable future, in South Africa, Namibia, Botswana and much of eastern and south-eastern Africa.

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### 1. Introduction

The Caracal *Felis caracal* is in the unusual position of being classified as rare and endangered in the North African and Asian sector of its range, with one subspecies (*Felis caracal michaëlis* Heptner, 1945) appearing in the I.U.C.N. Red Data Book (ANON 1969). However, in the southernmost extremity of Africa the Caracal is classified as a problem species and considered a major threat to the small-stock farming industry (STUART 1981). Despite these circumstances of rarity and problem species status, both of which require in-depth investigation, almost no research has been undertaken on this cat.

This short paper brings together most published records of the distribution of *F. caracal* with notes on the status of this species over its entire range. Further distribution records were obtained from museum collections and the author's personal records.

### 2. General distribution and status

The validity of the nine sub-species of *Felis caracal* recognised at the present time is questionable (SMITHERS 1975). Sufficient numbers of study material are only available for the two most southerly occurring sub-species *F. c. damarensis* and the nominate race *F. c. caracal*. For the purpose of this paper no sub-species are recognised.

*Felis caracal* is widely distributed in Africa around the margins of the Sahara Desert in North Africa, from Morocco, east to Egypt, Sudan, Ethiopia, central and southern Somalia, and in the west to Mauritania and northern Niger. It occurs throughout the rest of Africa, to the south of the Sahara, excluding the tropical forests of West Africa and Zaire, and most of Natal and Zululand in the south-eastern sec-

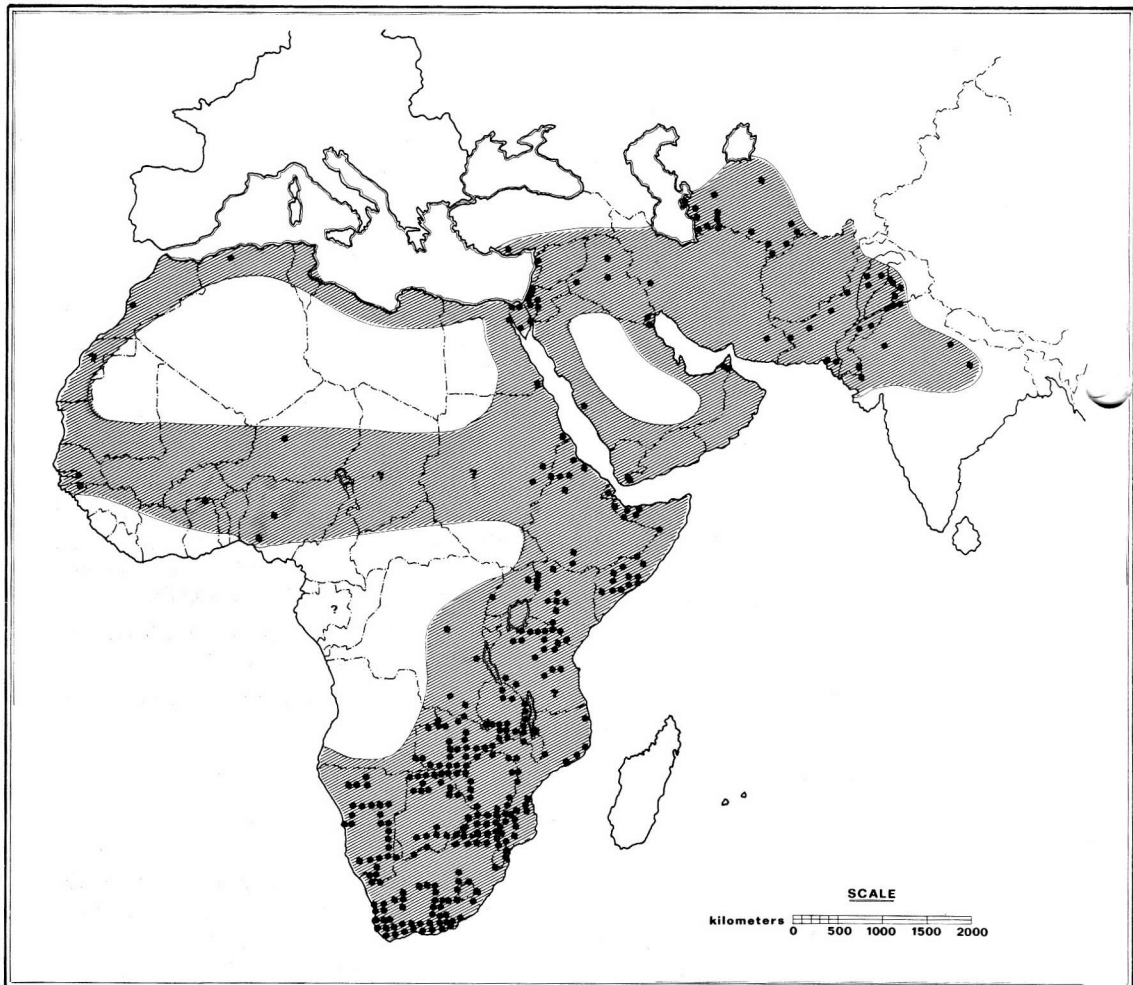


Figure 1. The total known range of *Felis caracal*. Dots indicate definite records and the stippled overlay shows expected distribution limits.

tor of South Africa. The total range of *F. caracal* also includes from eastern Turkey, Israel, Arabian Peninsula, Syria, Iraq, Iran, the deserts of Turkmenia (USSR) and in the vicinity of the Sea of Aral, Afghanistan, Baluchistan (Pakistan), to the northern and central areas of India (SMITHERS 1975). This cat's overall distribution is illustrated in Figure 1.

#### Asia

SESHADRI (1969) notes that *F. caracal* once ranged widely over the Indian subcontinent but is now thought to have disappeared from most of its former range. P. K. Gosh (pers. comm.) considers *F. caracal* a threatened species on the Indian sub-continent. However, PRATER (1965) believes the Caracal is still common in the north and north-west hills of Cutch, and probably still occurs in Rajasthan and Uttar Pradesh. REICHHOLF (in litt.) has seen a Caracal in the Sariska sanctuary in Rajasthan, India, in September 1981.

ROBERTS (1977) has dealt with the distribution of *F. caracal* in Pakistan in some detail, considering it to be rare and associated with arid sub-tropical scrub forest in northern Baluchistan and tropical thorn forest in the eastern desert border regions. Although apparently found in Afghanistan (HARRISON 1968; SMITHERS 1975), no specimen records have been traced. HARRISON (1968), NOVIKOV (1962), OGNEV (1935), SAPOZHENKOV (1962) and others have noted *F. caracal* distribution in Turkmenia (USSR). HARRISON (1968) also mentions the presence of Caracal from the vicinity of the Sea of Aral in Uzbekistan, to

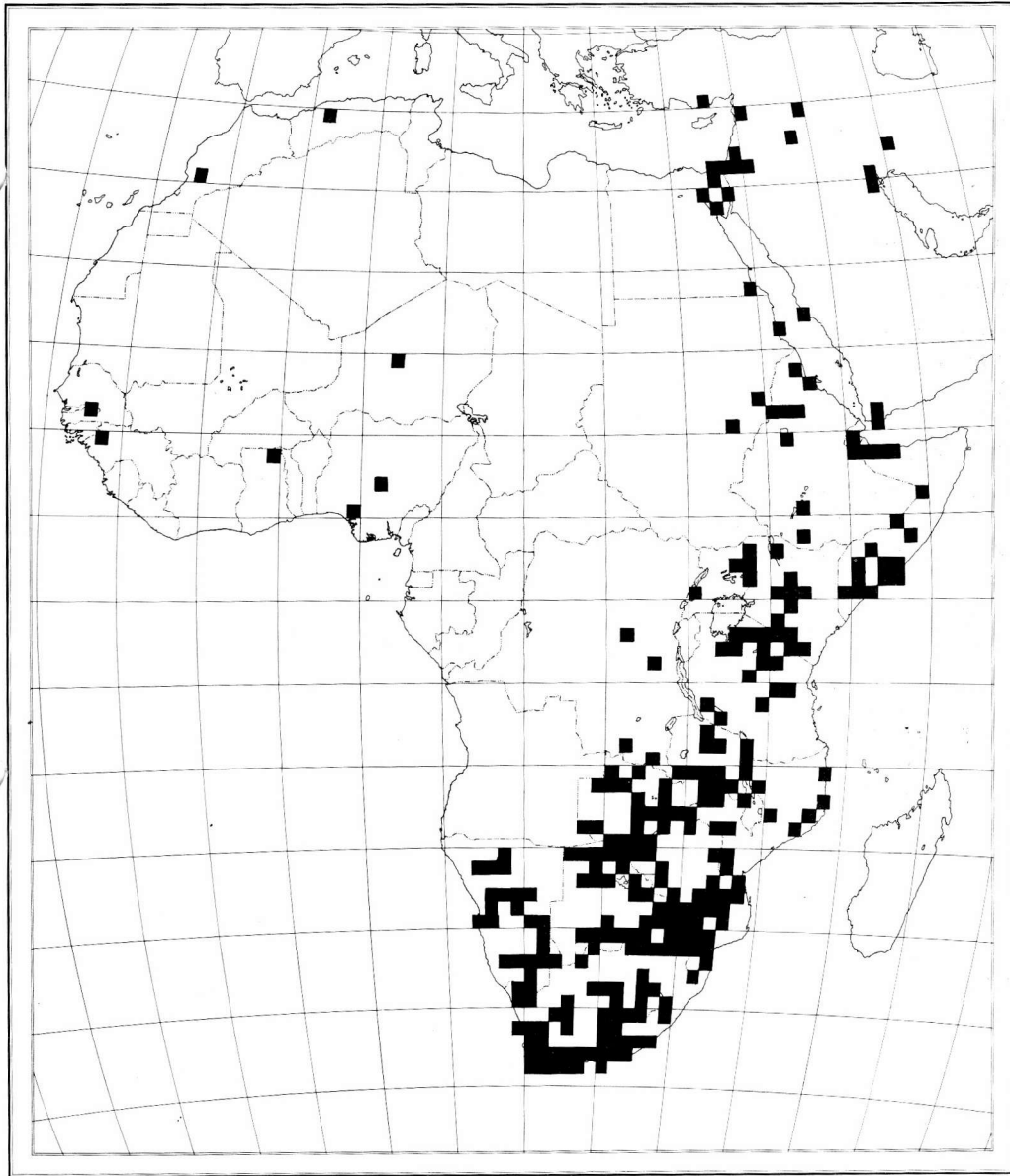


Figure 2. Map of Africa indicating specimen and literature records of *Felis caracal*.

the north of Turkmenistan. Much of Iran would appear to have suitable Caracal habitat, but little is known about distribution in that country. Specimens of Caracal have been taken in the south-east and south-west of Iran (POCOCK 1939).

#### Middle East

Records from Turkey are few, but according to HARRISON (1968), *F. caracal* is known from the south-east of that country. There is a specimen in the Alexander Koenig Museum (Bonn) collected in Turkey but with no details. CORKHILL (1930) has recorded Caracal in Iraq. The Caracal is known to occur in Kuwait and Oman (HARRISON 1968); the same author is of the opinion that *F. caracal* in Saudi Arabia probably occurs throughout the mountain ranges and hilly steppes, but considers it unlikely that it penetrates into the great sand deserts of the interior. MORRISON SCOTT (1939), THOMAS (1900) and YERBURY and THOMAS (1895) have recorded Caracal as being present in Saudi Arabia. MATSCHIE (1912) and HARRISON (1968) give locality records for Syria. HARRISON (1968) concludes that *F. caracal* is not uncommon in the Dead Sea area of Israel and Jordan, while AHARONI (1930), BODENHEIMER (1958) and POCOCK (1939) present records from several localities within this region. SKINNER (1979) recorded Caracal at an artificial feeding site at Sde Boqer in Israel.

#### Africa.

North. ROSEVEAR (1974) considers the occurrence of *F. caracal* to be unusual in Morocco, Algeria and other North African countries. The Paris Museum of Natural History has specimens from Essaouira (Mogador) in Morocco, and one specimen from Ouarsénis in Algeria. The Museum of Zoology (Firenze, Italy) has one specimen from Morocco. The Moroccan specimens were taken in 1915 and 1977, and the Algerian specimen in 1954. HARRISON (1968) records Caracal in Egypt, Libya, Algeria and Morocco.

West. ROSEVEAR (1974) believes that *F. caracal* manages to retain a foothold in West Africa but in many areas it is very rare. There are specimens in the British Museum (London) from the Gambia, Lake Chad, Ghana and Nigeria. In this region the Caracal is primarily restricted to the Sudan, Sahel and sub-desert regions. Two records are from the vicinity of high forest, the Gambia (Doka zone) and Nigeria (Ado Ekiti) (ANON 1970). Deforestation has turned the Ado Ekiti area primarily into open woodland (ROSEVEAR 1974).

Central. Although absent from much of west and central Africa, specimens of Caracal are known from the Katanga area of Zaire (D. Meirte, pers. comm.) and one specimen from Kigali, Ruanda.

ANSSELL (1978) notes *F. caracal* as being uncommon, but distributed throughout most of Zambia.

HILL and CARTER (1941) mention Caracal as occurring in Angola. HUNTLEY (1973) records the presence of this felid in the south-western Angolan provinces of Iona and Mocâmedes. J. Crawford-Cabral (pers. comm.) has confirmed the occurrence of Caracal in the same area. Caracal distribution in adjacent areas of Zambia and Namibia would seem to indicate the possibility of Caracal occurring in Angolan border areas.

East. *Felis caracal* is probably widely distributed in the Sudan (HARRISON 1968; J. Roche, pers. comm.) and Ethiopia (HARRISON 1968; J. Roche, R. I. M. Dunbar and M. L. Azzaroli, pers. comm.). AZZAROLI and SIMONETTA (1966) have documented Caracal distribution in former Italian Somaliland from 16 localities, primarily concentrated in the south. Records for northern Somaliland are given by HARRISON (1968). KINGDON (1977) has given the most detailed distributional picture for Caracal occurring in Kenya, Uganda and Tanzania. In Uganda it is restricted to the drier areas north of the Victoria Nile (KINGDON 1977). There appear to be no locality records for southern and western Tanzania (KINGDON 1977).

In Moçambique, SMITHERS and TELLO (1976) show that *F. caracal* occurs widely, although it may be absent from the north-central area and in the vicinity of the lower Zambezi River. Although TRAVASSOS DIAZ (1968) states that Caracal are rare in Moçambique, SMITHERS and TELLO (1976) believe that this cat is probably not as uncommon as the few records might indicate.

Records from Malawi (ANSELL 1978; SMITHERS and TELLO 1976; SWEENEY 1959) suggest that Caracal could occur widely in that country.

South. Present records indicate that Caracal are widespread in Namibia (Joubert and Mostert 1974; Lensing and Joubert 1977; Shortridge 1934; Stuart 1975). *F. caracal* is classified as a problem species in this territory, particularly in the south.

Roberts (1935) and Smithers (1971) have given records for Botswana, where *F. caracal* distribution is widespread but discontinuous. Smithers (1979) suggests that the Caracal is widely distributed in Zimbabwe. Rautenbach (1978) found the Caracal to be widespread in the Transvaal, South Africa. Lynch (1975) recorded *F. caracal* as widespread in the Orange Free State. In Natal, Caracal are apparently restricted to the foothills of the Drakensberg (south-west) and the Itala Game Reserve (Rowe-Rowe 1978).

*Felis caracal* is widespread and common in the Cape Province, although records are sparse in the interior, it is known to occur throughout this area (Stuart 1981; 1983). The highest densities are reached in the southern and western Cape, particularly along the coastal belt, the coastal mountain zone and the adjacent interior. In 82% of the Cape Divisional Council districts, Caracal are considered by farmers to be the principal wild predator of domestic small-stock (Unpublished records, Cape Department of Nature and Environmental Conservation).

The distribution of *F. caracal* in Southern Africa is illustrated in Figure 3.

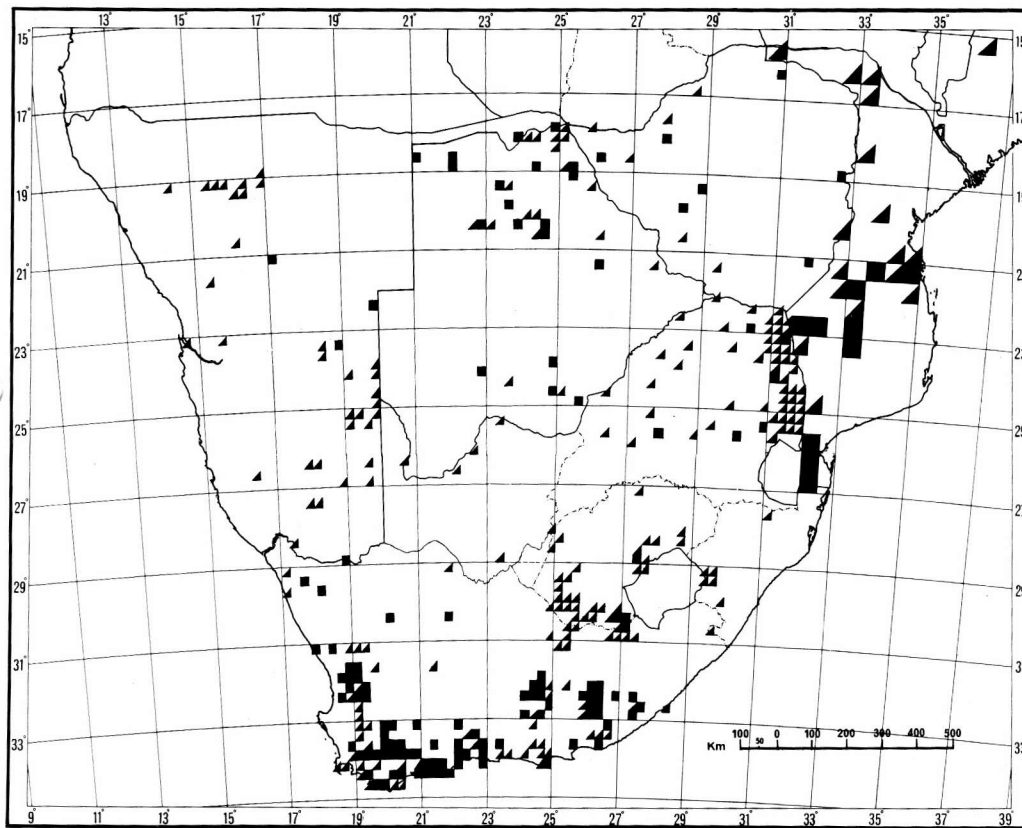


Figure 3. A detailed distribution record of *Felis caracal* in Southern Africa. Squares indicate specimen records and triangles literature and hunter records.

### 3. Discussion

It is only in South Africa and Namibia that the Caracal has attained problem status. At the present time, despite persecution by trappers and farmers, it is widespread and relatively abundant. Future initiatives in the conservation management, or the development of more selective control methods, of *Felis caracal*, should be based on a considerably more detailed knowledge of their basic ecology than has at present been achieved. The answer to the problem of carnivore conservation in general, and that of the Caracal in particular, revolves around the acceptance of the role of carnivores as key members of the biotic community. Blanket condemnation of all carnivores because of the depredations of a few problem animals is ecologically indefensible.

There is a need to establish, in greater detail, the current distribution and status of the Caracal in north-central, West and North Africa as well as the Asian sector of its range.

At this point in time it can be stated with confidence that the Caracal is secure, for the foreseeable future, in South Africa, Namibia, Botswana and much of eastern and south-eastern Africa.

### Zusammenfassung

#### Verbreitung und Status von *Felis caracal* Schreber, 1776

Die vorliegende Arbeit entwirft ein Bild von der Gesamtverbreitung des Karakals, *Felis caracal*, wobei Literaturhinweise, Museumsmaterial und persönliche Beobachtungen des Autors ausgewertet werden.

In Afrika umfaßt das Areal die Randgebiete der Sahara und einen Großteil des übrigen Kontinents. Die Art fehlt in den tropischen Regenwäldern Westafrikas und Zaires sowie in weiten Teilen von Natal und Zululand.

In Asien reicht das Verbreitungsgebiet von der östlichen Türkei, Israel, der Arabischen Halbinsel, Syrien, Irak, Iran, über die Wüsten Turkmenistans (UdSSR) und die Gegend um den Aralsee, Afghanistan, Beluchistan (Pakistan) bis nach Nord- und Zentralindien.

Für die nähere Zukunft kann der Bestand des Karakals in Südafrika, Namibia, Botswana und weiten Teilen Ost- und Südostafrikas als gesichert angesehen werden.

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