

*by T. J. Roberts*

# THE MAMMALS OF PAKISTAN

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M.A.(CANTAB.), M.S.A.(BRIT. COL.)

WITH A FOREWORD BY HIS ROYAL HIGHNESS  
PRINCE BERNHARD OF THE NETHERLANDS



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## CARNIVORA

In southern Sind young kittens have been captured in January and February but they may well be capable of breeding throughout the year. One Fishing Cat's lair, discovered near Sujawal, consisted of a rough nest of reeds in a dense thicket of Phragmites. The remains of a Coot (*Fulica atra*) and a Wood Sandpiper (*Tringa glareola*) were found in this nest (J. A. W. Anderson, pers. comm.).

Zoo captives have been described as excessively wary, so that their normal behaviour is difficult to observe (Ulmer, 1968). Mr. Blyth in Jerdon (1874) stated that he had kept several specimens which became quite tame and J. A. W. Anderson kept a male for over three years from the time it was a small kitten, secured near Haleji. This specimen was affectionate and could be handled freely by its owner. It climbed trees well and enjoyed swimming when taken near water. At this time I observed it swimming with its head well clear of the water and using both fore and hind legs with the tail acting as a rudder. It was never heard to 'purr' but occasionally at night-time it would call in a rapidly repeated 'eh-eh-eh' (J. A. W. Anderson, pers. comm.). F. A. Ulmer (1968) described a similar call emitted by the male at Philadelphia Zoo during the mating season. Captive specimens have lived 10 years (Dover, 1933).

## Genus PANTHERA Oken, 1816

Very large and powerful cats with the larynx modified to allow great distension at the back of the mouth for resonance.

## Key to the Subgenus PANTHERA

Dorsal profile of skull flattish with no concavity where the muzzle passes into the frontal interorbital region. (See Fig. 44.)

## Key to the Pakistan Species of PANTHERA

- (a) Pattern of body fur consisting of black spots arranged in rosettes against a tawny-buff background. No prominent black stripe from inner corner of the eye to the mouth. Tail relatively slim.  
... *Panthera pardus*
- (b) Very large size. Body with orange-tawny ground colour and thin vertical black stripes.  
... *Panthera tigris*

## PANTHERA PARDUS

*Panthera pardus* Linnaeus, 1758; Panther or Leopard (see Illustration 45).

Subspecies *Panthera pardus fusca* Meyer, 1794  
*Panthera pardus saxicolor* Pocock, 1927  
*Panthera pardus sindica* Pocock, 1930  
*Panthera pardus millardi* Pocock, 1930

**Taxonomy:** M. S. Siddiqi (1961) lists all the above four subspecies in his checklist of mammals relating to Pakistan territory. The present day population is so thinly distributed that it is hardly possible to separate individual specimens into so many recognizable subspecies though the population from southern Baluchistan and Sind Kohistan averages smaller in size than those from the northern Himalayan regions. Throughout its range, there is considerable individual variation in the pattern and density of the spots or rosettes on the body.

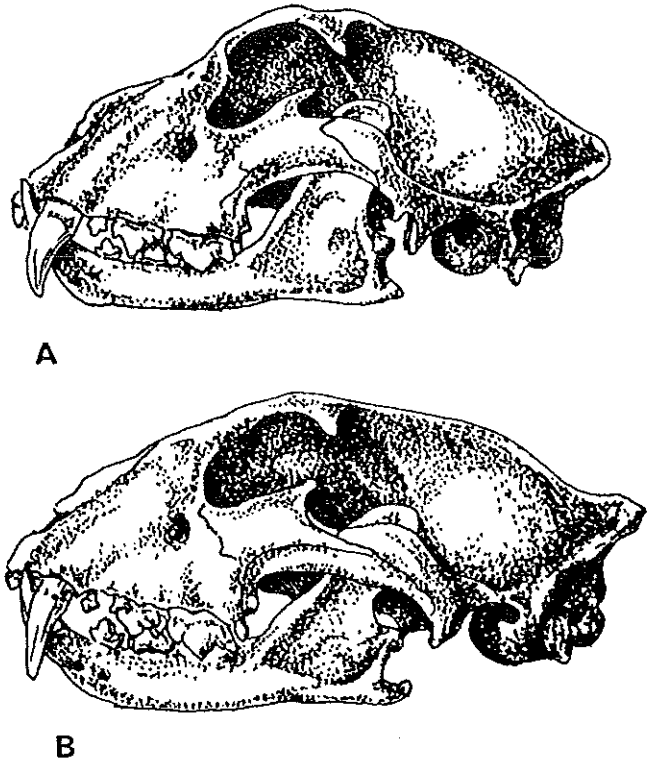


Fig. 44 Lateral view of skulls showing difference between Snow Leopard and Panther.  
A. *Panthera uncia*. Note less prominent sagittal crest and dished or concave profile in front of orbits.  
B. *Panthera pardus*. Note relatively smooth convex profile of skull in region of temple.

**Description:** The Panther, belonging to the group of large cats, is too familiar an animal to warrant detailed description. A large male may stand up to 66cm (26in.) at the shoulder and measure 117cm (46in.) head and body length. The tail which is long and slender averages about two-thirds of the head and body length, but can vary considerably in individual length. Dunbar Brander (1931) records a variation from 71–96.5cm (28–38in.) in tail length of Indian specimens. Panthers from the more arid regions of Baluchistan weigh not more than 40kg (90lb) and measure 91.5cm (36in.) from nose-tip to root of tail. Large specimens from India have been killed weighing as much as 69kg (152lb). Females are invariably smaller weighing about 6.8kg (15lb) lighter than males.

The panther has a deep, laterally compressed body with comparatively short stout legs and very broad massive forepaws (see Fig. 45). The neck is thick and muscular and the muzzle rather long and broad. The short rounded ears are black on their dorsal surface with conspicuous round white spots. The body colour varies from a golden orange colour to a paler greyish-fawn closely marked all over with black rosettes comprised of four or five concentric spots. Specimens from the Himalayan mountain regions of Pakistan have a long thick pelage in winter, the belly fur being particularly long. Specimens from southern Baluchistan, Waziristan and Sind Kohistan have short harsh fur. Captive specimens from Chitral and Swat, seen by me varied from paler greyish-fawn to tawny-buff in ground colour. The tail bears spots throughout its length and the forehead is also patterned with small spots. There are two authentic records of Black Panthers having been killed in Sind, one near Jacobabad in 1928 and the other just north of Karachi in 1939 (Eates, 1943 and

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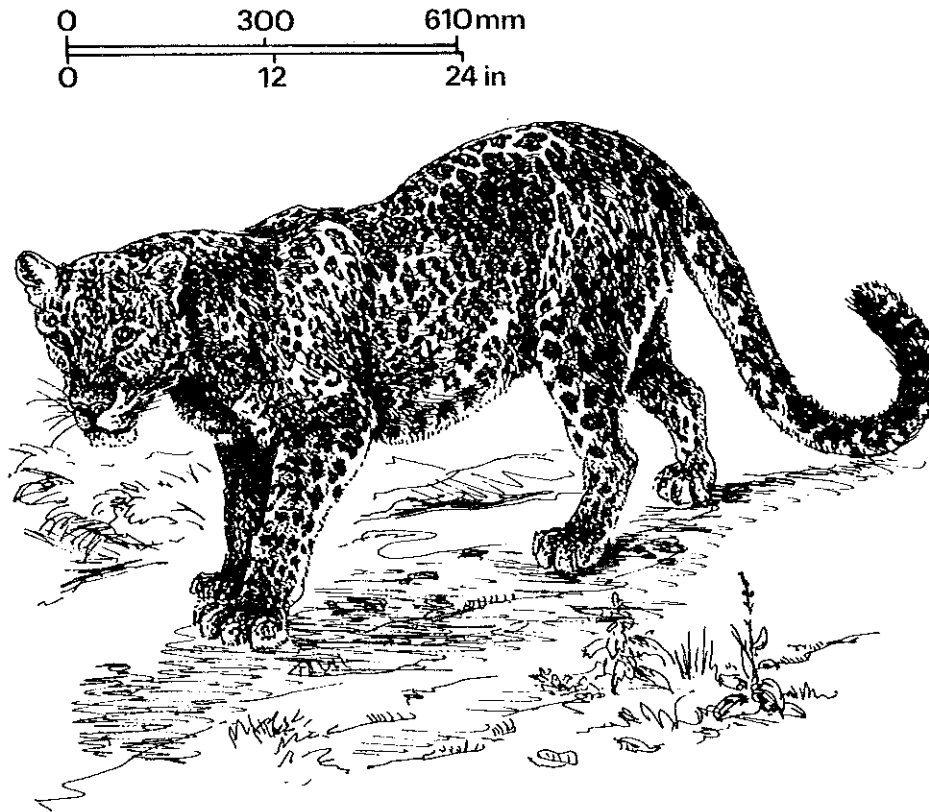


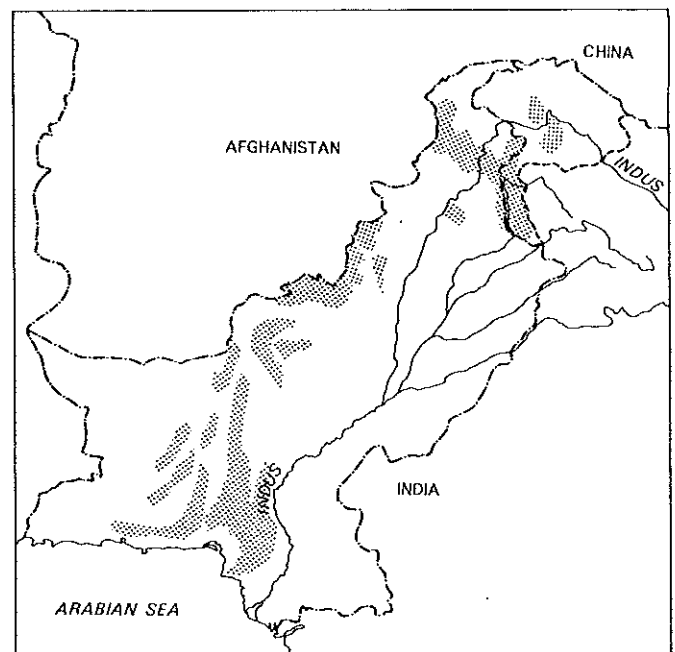
Illustration 45 *Panthera pardus*: Leopard or Panther. (Based on live captive specimen Lahore Zoo, adult male from Swat.)

1968). Unlike the smaller cats the pupils of the leopard contract to a small circle rather than an ellipse.

**Distribution and Status:** In Pakistan the panther is confined to Himalayan forest regions up to the limit of the tree-line or the lower altitude valleys in the more arid mountainous regions further north. It also inhabits broken hilly or mountainous country throughout Waziristan, Baluchistan and Sind Kohistan in association with acacia scrub forest. It formerly inhabited the Salt Range and still survives in the Kala Chitta Hills but has been absent from the more settled cultivated riverain tracts for many decades. In the southern part of its range, a few specimens are still occasionally reported from the Pab Hills whence a specimen was shot in 1968 by Dr. Rizvi. They still occur in the Kirthar Hills and Karchat Hills and very sparsely in the hill ranges of Kalat and Mekran. Dr. Schaller in 1973 saw signs (scats and tracks) in the Toba-Kakar range, as well as the Gishk Hills in Kalat. In the late 1960s two leopards were reported to be creating havoc amongst domestic goat flocks around Kaliphat in north east Baluchistan though there have been no recent reports of leopards from that region. Individual specimens frequently wander into the Murree Hills and almost every year there is a report of one being shot during the summer tourist season. They occur sparsely in southern Chitral around Rondu, and Chilas District of Gilgit, and they are probably slightly more plentiful in the better forested regions of Swat Kohistan and Hazara. There have been recent reports of panther still occurring in the Safed Koh Mountains as well as Takht-i-Sulciman and the North West Frontier Province.

Panthers presumably still occur very sparsely in Rajasthan (India) and individuals occasionally cross the border into

Pakistan. One such was shot in 1959 near Hasilpur (Bahawalpur Division) (Ahmad Nawaz Gardezi, pers. comm.). The late Nawab of Kala Bagh (pers. comm.) reckoned that about 12 panthers had been shot in the Salt Range in Mianwali District in a period of about 25 years up to 1967. Eates (1968) records that between 1896 and 1915, 21 panthers were officially reported as having been killed in Sind and that most of



*Panthera pardus*

Distribution Map 61 Panther or Leopard.

these were from the hills immediately to the west of Karachi.

Increased human settlement as well as the possession of firearms has made the leopard extremely rare throughout Pakistan including the remoter mountain regions. It is eagerly sought after both as a trophy by sportsmen as well as by local hunters because of its valuable fur. Despite its adaptability to all types of habitat it continues to decline in Pakistan and it would not seem too pessimistic to anticipate that it will follow in the steps of the lion (*Panthera leo*) and the tiger (*Panthera tigris*) by becoming extinct within this century in Pakistan if present hunting pressure continues.

Extra-liminally the panther occurs throughout Africa to Cape Province and spreads through Asia from the Caucasus through Arabia, Iraq and Afghanistan and across to eastern Siberia. It occurs throughout India, Ceylon, Malaysia, Burma, Thailand, Indonesia and spreading into south west China.

**Biology:** Within Pakistan where human disturbance is high, panthers may travel over a very extensive hunting territory, and depending upon food supply, may not remain more than two or three days in one locality. In northern India it has been estimated that an adult panther travels over a circuit from 30 to 40 miles long during the course of a year's hunting (Champion, 1933).

Normally solitary, the panther gives evidence of being an extremely wary and intelligent animal, hunting mainly only at night and even entering the precincts of villages without being detected by their human occupants.

Panthers will kill a variety of prey and do not spurn even snakes, lizards and small rodents. In Pakistan their preferred food varies according to the locality. In Baluchistan they prey on female and sub-adult Sind Ibex and Markhor. In the Kala Chitta Hills they prey on Urial, and in the forest regions of the Himalayas the Rhesus Monkey as well as domestic dogs are the main prey species. In regions where natural game is limited, panthers are notorious for attacking domestic livestock and in Pakistan they have been known to kill adult cows as well as calves, donkeys, ponies, goats and sheep. In 1968 there was an instance of a pair of panthers attacking a camel near Kaliphat in north east Baluchistan. Swift fleeing animals may be knocked off balance by a blow with the fore-paws, but are always finally overcome or killed by the panther gripping them in the region of the throat. The victim is subsequently pulled to the ground where it dies of suffocation, or even occasionally from a broken neck, since the panther does not release its hold until the victim is dead. In Dunga Gali a panther twice entered the bazaar at night-time during the summer of 1965. On one occasion whilst shops were brightly lit, a large white dog was carried off in front of two witnesses. According to local account the panther is believed to be particularly fond of preying upon porcupines both in the Kirthar Range and the Salt Range. These observations by local hunters are corroborated by many accounts in old journals of the Bombay Natural History Society describing panthers which were found to have porcupine quills embedded in their paws or head after they had been shot.

In forested areas Panthers frequently carry their kill up into a tree in order to be able to consume it without competition from other scavengers. Dunbar Brander recalls seeing a deer in central India hauled up into a tree. It is doubtful whether this habit is frequent in Pakistan. Out of two natural panther kills seen by me, one was a calf which had been partially eaten in the groin and it is believed that most panthers prefer to start eating at this point. The second, a

donkey was not eaten since the panther was disturbed immediately after making the kill. Its claw marks were clearly visible on the donkey's hind quarters as well as deep tooth punctures on the throat. Even in Pakistan it is probable that wild game comprises the greater part of their food, though the occasional panther attack on a domestic animal is so widely reported in the villages that they acquire an undeservedly bad reputation.

In India in the warmer tropical regions panthers appear to be able to breed throughout the year (Prater, 1965) though Dunbar Brander (1931) believed that more cubs were born just at the beginning of the monsoon than at any other time. The period of gestation varies from 98 to 105 days according to many records of successful captive breeding (Crandall, 1964). In the wild a litter usually comprises two and rarely up to four young and it is significant that the male appears to remain in attendance whilst the female is suckling. It seems probable that in the northern Himalayan regions of Pakistan litters are only produced in the spring and summer months.

During the day panthers lie up in natural caves or enlarged porcupine burrows. At night they tend to follow man-made paths or goat tracks and this habit has often been taken advantage of by local hunters in setting pitfall traps. It has been observed that if the grass is tall and wet with dew the panthers deliberately avoid walking through such grass preferring to use paths (Champion, 1933). They can swim but do not seem as fond of water as tigers (Stockley, 1928 and Dunbar Brander, 1931).

The call of a panther is not particularly loud or resonant, consisting of three to four quickly repeated coughing barks which have been likened almost to the rasping sound of a saw.

Panthers have been known to become dangerous man-eaters in India and there is a record of an individual which killed more than 200 persons within a period of three years (Finn, 1929). I have come across no known records of panther attacking man in Pakistan.

The panther has always been regarded with a mixture of fear and even contempt in Pakistan and it has been ruthlessly persecuted whenever encountered. Though its predation on half wild village dogs as well as crop destroying Rhesus Monkeys (*Macaca mulatta*) and porcupines, could be considered of benefit to man it will probably continue to be classed as vermin with no legal protection against hunting in this region because of its depredations upon domestic flocks. Captive panther have lived for 17, 18 and 21 years (Crandall, 1964).

#### Subgenus TIGRIS Oken, 1816

#### PANTHERA TIGRIS

*Panthera tigris* Linnaeus, 1758; Tiger.

The tiger is of course extinct in Pakistan but it should be a sobering thought that it has only become so within the last 70 years, in a region which cradled man's civilization for over 4000 years. J. A. Murray, in describing the fauna of Sind in 1884, stated that Khairpur State in the Indus riverine forest tracts was its last stronghold. The last survivor, a tigress was shot in 1886 by Col. McRae (Eates, 1968). The late Amir of Bahawalpur, H. H. Sir Sadiq Muhammad Khan Abbasi, related how his father had shot 13 tigers within Bahawalpur State territory in the Indus riverine jungles and that the last specimen was shot by him in 1906 a few miles below Panjnad (pers. comm., 1965). At that time the Indus River was sur-

rounded by a continuous belt from four to twelve miles wide of *Tamarix doica* and *Saccharum munja* jungle.

Subgenus LEO Oken, 1816

PANTHERA LEO

*Panthera leo* Linnaeus, 1758; Lion.

The last specimen of the lion recorded within Pakistan territory was an animal shot in Sind near Kot Diji in 1810 (Kinneer, 1920).

The Asiatic lion was supposed to have been hunted at the beginning of the nineteenth century in the thorn jungle around the bed of the old Hakra River near Derawar according to the late Amir of Bahawalpur (pers. comm., 1965).

Subgenus UNCIA Gray, 1854

Dorsal profile of skull with concavities where muzzle passes into frontal interorbital region. Orbits high and prominently elevated (see Fig. 44).

Key to the Pakistan Species of UNCIA

Fur very long and of a greyish-buff ground colour and black spots on flanks forming irregular hollow circles. Spots in spinal region of pelvis fusing into continuous lines. Tail noticeably thick and bushy and roughly equal to head and body length.

... *Panthera uncia*

PANTHERA UNCIA

*Panthera uncia* Schreber, 1776; Snow Leopard or Ounce (see Illustration 46).

**Description:** Of all the larger cats the Snow Leopard is perhaps the most beautiful. Its fur besides being thick and deeply luxuriant is most handsomely marked. Similar in general appearance to *P. pardus* it averages smaller in size with a relatively longer tail which is much thicker and bushier. The head and body length varies from 100–110cm (39–44in.) with the tail 84cm (33in.) in length according to flesh measurements from three specimens from Gilgit and Baltistan (Ward, 1924B). It stands about 56cm (22in.) at the shoulders. There appear to be no weight records but an adult female was estimated to weigh about 36kg (80lb) (Schaller, 1971C). Like the Panther, *P. pardus*, the fore-legs are relatively short and powerful and the paws appear particularly massive. The head differs markedly from that of *P. pardus* in that the skull in profile has a marked step in front of the eyes and this enables the skulls of the two species to be easily separated (see Fig. 44). It has a rather long broad nose with powerful jaws and relatively short rounded ears as in *P. pardus*. The back of the ears are rimmed with black the middle portion being whitish-yellow. The area around the lips is conspicuously black and the forehead bears a scattering of small solid black spots. The iris is pale green. The body colour is grey varying to greyish-buff with widely scattered black spots on the outer surfaces of the limbs merging to large black rosettes or irregular circles along the upper flanks and back. In the lower region of the spine these coalesce into two continuous black lines. The centre of the larger rosettes is generally of a darker grey than the rest of the body fur and in winter coat these spots give the impression of having been painted on to wet blotting paper. The dorsal surface of the tail bears two parallel rows of rosettes with darker centres. The distal one-

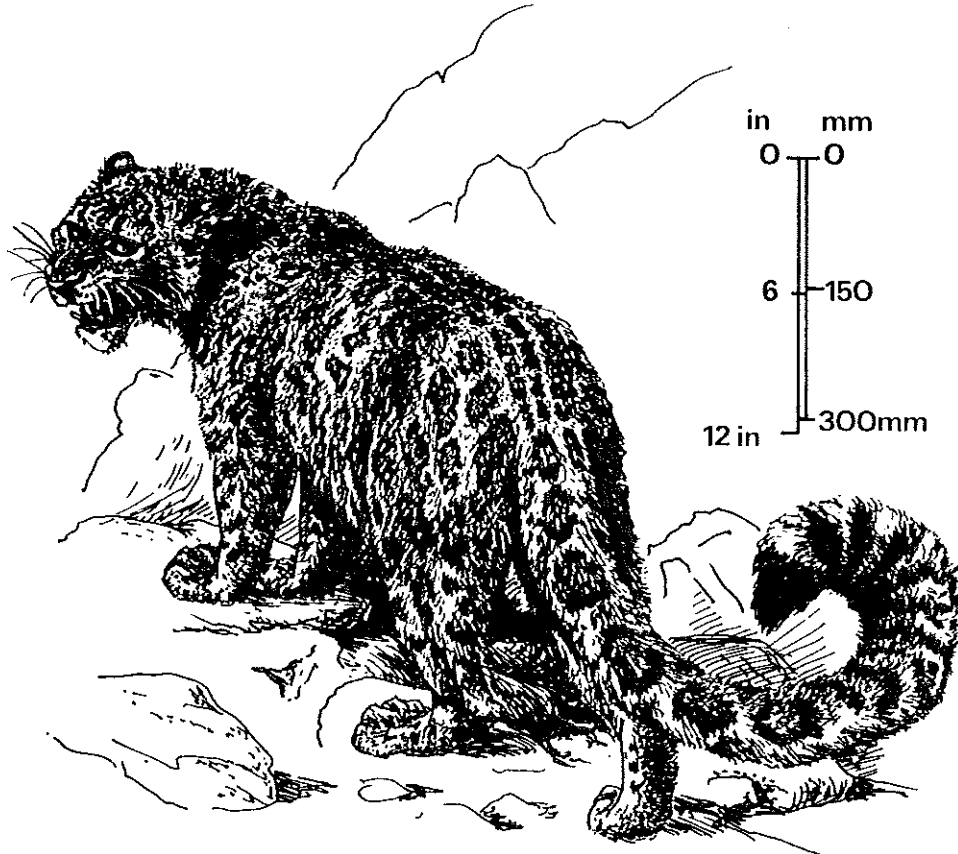


Illustration 46 *Panthera uncia*: Snow Leopard. (Based on trade skin of specimen secured near Chitral in November and photographs of six month old male from near Hunza.)

third comprise solid black blotches whilst the ventral surface of the tail is whitish-buff without spots. The fur in the region of the chest and belly is very long and luxuriant but also bears scattered black spots.

The very long thick tail is one of the most striking features of the Snow Leopard and it is undoubtedly an important balancing organ when the animal negotiates steep cliffs.

**Distribution and Status:** The Snow Leopard might more appropriately be called the Rock Leopard, inhabiting as it does comparatively arid alpine regions where its pelage merges imperceptibly with the grey rocks of its background. In Pakistan it inhabits the inner Himalayan ranges where both snowfall and rainfall is scant. In summer it ranges to the highest alpine meadows up to 5200m (17,000ft) elevation but in winter will occasionally descend the broad mountain valleys to as low as 1500m (5000ft). Several writers have stated that it remains above the limit of the tree line (Prater, 1965, and Walker et al., 1964). But in Pakistan this is definitely not so and in Chitral a female has been observed even in August as low as 1500m (5000ft) in *Quercus ilex* scrub forest whilst specimens have been seen on several occasions in the spruce (*Picea morinda*) around the lower slopes of Nanga Parbat to the south of Astor.



*Panthera uncia* Present distribution  
*Acinonyx jubatus* Possible distribution

Distribution Map 62 Snow Leopard or Ounce.  
 Chectah.

Snow Leopards occur very sparsely in northern Chitral and over most districts of Gilgit, in northern Hunza and Baltistan. Many years ago a Snow Leopard was shot within a short distance of the Residency in Gilgit town at about 1500m (5000ft) elevation though it is probable that they spend most of the year in much higher and remoter mountain regions. There is no definite record of Snow Leopards occurring in Swat Kohistan but they have extended southwards into Indus Kohistan on the left bank of the Indus south of Gilgit where Major A. Gsell shot a specimen in 1962. They are probably least rare in the northern regions of Hunza and the

Deosai Plateau in Baltistan but this beautiful animal must be considered as very thinly distributed in Pakistan. Its luxurious pelt is still purchased by tourists from the shops of Rawalpindi and Peshawar and local hunters could obtain the equivalent of £15-£20 for an uncured skin in 1972 (*Animal Magazine*, 1972). Apart from this in many parts of Gilgit when a local man succeeds in killing one of these creatures he is rewarded and feasted by the entire village because they are considered so destructive to the goat flocks (Rajah of Gupis, Hasan Ali Khan, pers. comm.). Legislation was promulgated in 1968 in Pakistan banning the trade in leopard skins but this has not been effectively enforced up to the time of writing. Six Snow Leopards were known to have been killed in Chitral during the winters of 1971/72 (G. B. Schaller, pers. comm.) and it is still possible (1973) to see Snow Leopard skins hanging on display in furrier shops.

Extra-limally the Snow Leopard extends eastwards across the Himalayas through Nepal and Bhutan and occurs sparsely throughout Tibet and Outer Mongolia. It also occurs in the northern mountain regions of Afghanistan and the USSR in Tien Shan and Altai Mountains (Bobrinskii et al., 1965). There is no valid evidence of its occurrence in Iran. The IUCN lists this species in the Red Data Book as being in danger of extinction and certainly it is becoming increasingly rare and in need of protection from fur traders. The estimate for the whole Himalayan complex of mountains was given as 400 (IUCN, 1970). In the opinion of experts like Dr. G. B. Schaller this estimate appears too low.

**Biology:** The Snow Leopard lives a solitary existence and like *P. pardus* appears to travel widely and to hunt over a very extensive area. Two individuals observed by Schaller (pers. comm., 1973) in Chitral only remained one week and four days respectively within particular valleys before moving elsewhere though they were tempted to stay with a plentiful supply of live goats as bait. Like other carnivores inhabiting high mountain areas, the Snow Leopard is not exclusively nocturnal. Col. Stockley (1928) observed one stalking Ibex (*Capra ibex*) by daylight. In the daytime they probably shelter in some natural cavern or cleft beneath an overhanging rock but they are fond of sunning themselves on some rocky ledge at times. I know of two recent instances where unsuspecting Snow Leopards were killed by hunters whilst sleeping in the middle of the afternoon (Manzoor-ul-Haq, Astor, pers. comm., Major A. Gsell, Indus Kohistan, pers. comm.).

The Snow Leopard probably preys mainly upon Markhor (*Capra falconeri*), Ibex (*Capra ibex*) and Bharal (*Pseudois nayaur*), and domestic stock, in Pakistan. Out of 16 Snow Leopard scats examined by G. Schaller (in lit., 1970) in Chitral Gol Reserve, five contained remains of Markhor, eight had remains of domestic sheep and goats, two consisted of unidentified forbes and one of soil. Lydekker (1907) describes them as preying mainly upon Bharal in Ladakh. No doubt they will prey upon smaller animals such as hares (*Lepus capensis*), Long-tailed Marmots (*Marmota caudata*) and even Himalayan Snow Cocks (*Tetraogallus himalayensis*). Unfortunately there are many recorded instances of Snow Leopards attacking domestic sheep and goats, and they appear occasionally to kill such domestic stock wantonly and in excess of their needs. A Snow Leopard in Yasin District of Gilgit broke into a hut in which goats were penned and killed or maimed eight animals before it was frightened away by the aroused villagers (Rajah of Gupis, Hasan Ali Khan, pers. comm.). Pocock (1939) refers to a pair of Snow Leopards which harassed the farm of the Moravian mission at

Kailing in Lahul, regularly marauding domestic livestock and it is noteworthy that in a village near this same mission, a Snow Leopard entered a house at night-time in mid winter. One end was occupied by the human owners, and the other by goats to which the leopard must have been attracted. The man seized a burning stick from the fire and succeeded in beating off the Snow Leopard (Friedel Peters, pers. comm., 1965).

Snow Leopards have proved to be rather delicate animals in captivity and they have only recently been successfully bred in zoos. Several Russian and United States' zoos have now had repeated successes and a total of 45 litters have been recorded born in captivity (*International Zoo Year Book*, 1970). The gestation period varied from 98–103 days with females generally coming into oestrus towards the end of winter (Yunchis, 1968 and Frueh, 1968). In Pakistan a litter of two cubs was captured in Hunza in 1965 which appeared to have been born in late May or early June. One of these cubs was successfully reared to six months of age before it was exported to Frankfurt Zoo. It was quite amenable to being handled by certain family members and played like a domestic kitten when younger (W. Mumby, pers. comm.). Two years previously he also received another litter of two cubs from Hunza which appeared to have been born in early June. In 1957 a litter of three cubs was found near Rama Lake, Astor District, Gilgit in late June. These cubs, presented to the tehsildar, did not survive more than a few days in captivity, and from his description appeared to have been very young. A female Snow Leopard with a cub was observed by several persons in November and December 1970 in Chitral Gol Reserve. G. Schaller (pers. comm. 1970) estimated that this cub had been born towards the end of August.

Like *P. pardus* the Snow Leopard has a habit of following definite tracks such as goat tracks and the local hill people sometimes succeed in capturing them by digging pit traps across such regularly frequented paths. As mentioned earlier they are very agile in climbing up precipitous rock faces and can leap tremendous distances (Ognev, 1935). The young cubs reared by W. Mumby emitted a sort of whimpering cry not unlike a calf bleating when they were hungry. Even when not under observation they tended to move with a rather crouching and slinky gait with their belly close to the ground. When feeding they made a spitting noise similar to domestic cats if approached too closely. Schaller (pers. comm., 1970) recalls watching the female Snow Leopard in Chitral Gol sitting on top of a large rock during a snowfall. The snow visibly accumulated on top of the Leopard's head and back without the animal making any attempt to shake this off its fur, a testament to its wonderful insulating qualities. The same female killed a goat tied up as bait in the presence of G. Schaller (pers. comm.). The goat having observed its adversary and turning to face it was knocked over with a rush and seized by the throat and pulled to the ground.

#### Genus ACINONYX Brookes, 1828

Very large cats with long slender legs and build modified for cursorial predation. Claws on all feet only partially retractile and the body is marked all over with solid black spots, not rosettes, against a tawny-buff ground colour.

#### Key to the Pakistan Species of ACINONYX

A conspicuous black stripe extending from the inner corner

of each eye and down below the mouth. Body covered all over with solid black spots.

... *Acinonyx jubatus*

#### ACINONYX JUBATUS

*Acinonyx jubatus* Schreber, 1776; Cheetah.

It is generally considered that the cheetah has become extinct within the Indo-Pakistan subcontinent where it once was widely scattered throughout the dryer regions of central India and the Deccan Plateau (Prater, 1965 and Seshadri, 1969). In fact the final senseless slaughter of this harmless creature in India is recorded in the *Journal of the Bombay Natural History Society*. The ruler of Korwai State (wrongly referred to as Korea in the journal) shot three cheetah in one night as they stood transfixed in the head-lights of his car (Van Ingen and Van Ingen, 1948). There have been no authentic sightings since that date in India.

However, it is still probable that the Asiatic Cheetah enters Pakistan territory in the extreme south west of Baluchistan even if it is not permanently resident in that region. Due to the region's extreme inaccessibility, both geographic and political, it has not been adequately surveyed by any zoologists in recent decades. In 1912 a specimen was collected at Schorab in the southern part of Kalat State, and this skin is still in the British Museum collection. In the extreme south west of Fars Province of Iranian Baluchistan, cheetahs have been recently discovered still surviving in small numbers. The Chicago Field Museum has a specimen from Bampur close to the border of Kharan District in Pakistan in Baluchistan. The Street Expedition obtained a specimen in 1963 from Damin in Kerman Province (Lay, 1967).

Both the inhabitants of the Mekran and of regions further north in Chagai and Kharan have separate words in their language to distinguish the cheetah and the panther and interrogation of local persons has on many occasions led to the response that both species still occur in south west Baluchistan. In the Mekrani language the leopard is 'abtar' and the cheetah 'gurk'. In the Brahui language the leopard is 'khaleja' and the cheetah is 'yeoz'. The nephew of the Khan of Kalat claimed to have shot a cheetah near Turbat in mid February 1968 but it was not possible to see this skin. In 1972 J. A. W. Anderson (pers. comm.) obtained a trade skin which was alleged to have come from the border regions of the Mekran, and this is lodged with the Royal Scottish Museum. There is still a widespread population of gazelles (*Gazella gazella*) in these regions bordering Iran which would provide the natural food prey of the cheetah and it seems very probable that the above two records would relate to animals killed within Pakistan.

J. A. Murray (1884) stated that cheetah were still widespread in the dry hilly country to the west of the Indus River when writing about the fauna of Sind at the turn of the century. In 1970 a Peshawar furrier received a cheetah skin which came from Afghanistan traders and there was another skin in Lahore in 1972. Both these specimens had extremely long soft belly fur and could have come from mountainous colder steppe regions of Afghanistan bordering the USSR. They were both sub-adult specimens with a fairly pronounced dorsal crest of longer hairs extending from the nape down to the shoulder.

Throughout its range the Asiatic Cheetah is extremely rare and it is hoped that the species will be totally protected in Pakistan if it is possible to create a reserve in south west Baluchistan in collaboration with the Iranian Fish and Game Department who have already declared a reserve for the cheetah in that border region.