



Introduction

Emperor Zahiruddin Mohammed Babur was a superb statesman and sportsman who established the Mogul dynasty in Delhi. He was also a keen naturalist and maintained a diary known as *Babur Nama*. In his memoirs, written over four centuries ago, he gives interesting accounts of the fauna and flora of places he visited. In one instance, Babur reports a tiger hunt which occurred on the way to Bagram, 80 km north of Kabul. In the plain of Katawaz he describes how his men circled a group of wild ass *Equus hemionus* and hunted them in large numbers. In another chapter he discusses the presence of trees on the outskirts of Kabul. Unfortunately, today there are no signs of tigers in Afghanistan nor of trees around Kabul, except for some ornamental ones which have been planted in a suburban setting.

What remains of our wildlife has been exterminated extensively. Forests are being denuded at a high rate and two decades of war has had catastrophic results on the natural resources of the country. The monsoon forests, which comprise less than three percent of the forested region of the country, are being cut down at an alarming rate and the timber sold in markets both inside and outside the country. Many animal species are suffering severely from habitat destruction and persistent hunting pressure. Those species which have adapted to the harsh climate of remote valleys and high altitudes have been able to survive while other species adapted to open habitats, i.e. plains and deserts, are being persecuted mercilessly. Many species have little chance of survival and it is likely that some have become extinct while others are suffering due to habitat degradation and hunting. Aitchison in 1889 records seeing over a thousand onagers in the plain of Ghulam-i-Maidan in Herat province. However, 30 years ago only a dozen onagers were reported in their former range in western Afghanistan, and the chances are that this beautiful equid has been completely exterminated in the country.

Altogether one-hundred-and-twenty mammalian species have been recorded in Afghanistan out of which the Caspian tiger *Panthera tigris virgata*, Asiatic cheetah *Acinonyx jubatus venaticus* and musk deer *Moschus moschiferus* are considered extinct. The leopard *Panthera pardus*, snow leopard *Uncia uncia*, sand fox *Vulpes ruppelli*, Blandford's fox *Vulpes cana* and three species of ungulates, the goitered gazelle *Gazella subgutturosa subgutturosa*, markhor *Capra falconeri* and Bactrian deer *Cervus elaphus bactrianus* are listed as threatened.

Indiscriminate hunting, destruction of suitable habitats, deterioration of

range conditions, lack of laws governing the use of natural resources and the difficulties in imposing law and order in a tribal society are factors that have decimated carnivore and ungulate populations which are economically valuable due to their trophies or furs. In the case of rodents, these conditions have resulted in an opposite trend. Due to a decline in predators they have increased in number and in some places are threatening the well-being of human settlements.

Our present knowledge about Afghanistan's fauna is limited. Little research was done in the field when conditions were stable in the country. This was mainly due to inaccessibility, difficulty in travel, lack of trained personnel, a severe shortage of funds and little interest in nature and the environment by a majority of the population. Prior to 1900 British military personnel serving in Afghanistan collected mammals from various parts of the country. The natural history interests of these people was not in mammalogy but botany or ornithology. The specimens collected by them are common mammals which are most abundant and can be easily caught. J.L. Chaworth-Musters conducted the first zoological expedition in the country in the 1930s whose primary objective was to collect mammals.

The Third Danish Expedition to Central Asia (1948-49) collected 155 mammalian specimens from Afghanistan, which are recorded in Dr. Knud Paludan's unpublished "Notes on Afghanistan Mammals". Some field surveys were done in the 1960s and 70s by European and American institutions. The Street Expedition of the Field Museum of Natural History, Chicago carried out a survey of mammals in 1965 and a team of German scientists from Bonn University, affiliated with the Faculty of Science, made comprehensive collections of mammals. Noteworthy among the German collection are the works of Kullmann and Niethammer who undertook mammalian surveys from 1962 to 1965. Between 1966 and 1968 the Czechoslovak Team working in affiliation with the Nangarhar University collected mammals in different parts of the country. With the establishment of a wildlife conservation project sponsored by the Food and Agriculture Organization of the United Nations, data was collected on the distribution and status of mammals and birds during reconnaissance surveys held in different parts of the country to establish protected areas. The information was presented in the form of a field document in 1977 to partially rectify the lack of knowledge on the status and distribution of the mammals of Afghanistan.

As a result of the civil war, which has prevailed in the country since 1978, little attention has been paid to science and the preservation of natural resources. Lack of security in recent years has prevented scientists from

going into the country to conduct field studies. Using the past data as baseline information and available literary sources this treatise is meant to emphasize upon what is known about the mammals of Afghanistan. This book provides information on the ecology, behavior and status of the animals. It is an attempt to synthesize field observations, published and otherwise reliable information on the distribution, status and life-history of the mammalian fauna of the country and is intended to be used as a reference for future studies in the field.

Threatened Species Categories

Extinct - Species not definitely located in the wild during the past 50 years.

Threatened - Taxa in danger of extinction and whose survival is unlikely if causal factors continue operating.

Rare - Taxa with small populations not endangered or vulnerable at present.

Unknown - Taxa about which there is not enough information available to classify them in any of the above categories.

Distribution maps

The white circles in the distribution maps show the localities where specimens have been collected or observed while the dark areas indicate the probable range of a species. Maps with a question mark show suspected distribution of those species about which little information is available.

LEOPARD***Panthera pardus* (Linnaeus, 1758)**Pashto: *prang*Dari: *palang*

Description: The leopard is a muscular cat with laterally compressed body, stout legs, massive forepaws and a thick muscular neck. The face is roundish with long white whiskers. The short rounded ears are black on their dorsal surface. Body color is golden orange to grayish- fawn covered by black rosettes comprised of four or five spots. The summer coat is short and dense while in winter it is long, hairy and with considerable under wool. The throat, chest, belly and inside of the limbs are white. The tail which is about two thirds of the body length measures 80-90 cm. It is covered by a thick layer of fur with rosettes. A large male stands 65 cm at the shoulder but the females are smaller and lighter than the males.

Habitat: 1,500-4,000 m. Rugged mountains, coniferous forests, plains, semi-deserts and hilly steppes.



Habits: The leopard is a solitary animal that is mainly active at night. It cautiously stalks its prey which includes a large variety of animals such as wild goats and sheep, antelopes, monkeys, dogs, hares and rodents. Leopards are capable of carrying their kill onto a tree to consume it without disturbance from scavengers. They are known to attack and kill domestic livestock including animals as large as a donkey (Roberts, 1977). In the warmer tropical regions of India the leopard breeds throughout the year (Prater, 1965). The period of gestation varies from 98 to 105 days (Crandall, 1964). Litter size varies from two to four kittens which are blind at birth. Males remain in attendance of the litter when the female is suckling. It takes shelter in caves or in trees.

Distribution: Found in all of the major mountain ranges the leopard inhabits the Hindu Kush, Kohe Baba, Kohe Paghman and Safed Koh ranges of the central highlands, the Wakhan corridor and Darkad peninsula of Badakshan (Habibi, 1977). Despite habitat destruction it has still maintained a foothold in the Khost Fereng and Salang mountains (Sultani, pers. comm.). A specimen shot by Kullmann was taken from the Lataband pass between Kabul and Sarobi. Other records from eastern sections of the country are from the Logar valley, Dare Pech in Kunar province and along the border zone near Torkham (Kullmann, 1965). During a field trip to the Ajar Valley in October 1976 we came across a hunting party which had seen a leopard in the Surkhab bowl. Its geographical distribution is larger than any other member of the cat family and it is found over most of Africa and Asia (Morris, 1965).

Status: Threatened. A good market for furs has decreased numbers in most of its former habitats thus it is encountered rarely in some of the most remote and rugged montane regions. Considered a notorious killer of domestic animals a leopard is chased by hunting parties when it causes considerable damage to livestock. Rodenburg (1977) estimated about 80-100 animals were taken annually to supply the burgeoning fur market during a survey of furriers in Kabul. Despite a ban on the trade of its skins leopard skins are openly sold by vendors in the major cities of Afghanistan and Pakistan.