

DISTRIBUTION AND STATUS OF MOUNTAIN UNGULATES IN AFGHANISTAN

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ABSTRACT

As of 1978 (more recent data are not available), viable populations of Marco Polo sheep occurred in Afghanistan. Isolation from populated areas and a royal decree forbidding illegal hunting enabled the survival of the species then. Widely distributed in the major mountain ranges, the urial was then surviving in adequate numbers. The status of markhor, however, was even at that time considered to be endangered. Excessive hunting continued to reduce its numbers. Few data were available on the distribution and status of the wild goat. Hunting pressure and livestock grazing forced these animals to retreat to isolated and rugged ranges. Observed only in small groups, the future of the species was considered tenuous. Though adapted to the most precipitous terrain of the Hindu Kush ranges, both subspecies of ibex populations still occurred in large numbers.

INTRODUCTION

Few data are available on the biology of mountain ungulates in Afghanistan. It is clear from historical records (Aitchison 1889, Babur 1970) however, that the once abundant fauna of the country has been greatly diminished. The introduction of modern firearms, roads and increasing human population resulted in impoverishing faunal communities throughout the country.

To ensure effective management and to stimulate economic tourism, a natural resources conservation program was launched in 1972 with the cooperation of the Food and Agriculture Organization of the United Nations. As a first step, detailed ecological studies of ungulate species were conducted. This report summarizes those efforts and recorded findings on the distribution and status of Afghanistan's wild sheep and goats prior to 1978.

In the early 1970's the government sought help from the World Wildlife Fund to assess the status of the endangered Bactrian deer (Cervus elaphus bactrianus). Two years later, with the assistance of FAO, a wildlife conservation project was started under Dr. Ronald G. Petocz. The establishment of 5 wildlife sanctuaries in 1978 marked a turning point in the history of Afghan conservation. Despite the good intentions of the project, however, the promising indications that conservation was taking hold in the country faded after the 1978 switch in government.

DISTRIBUTION AND STATUS

MARCO POLO SHEEP

The range of Marco Polo sheep (Ovis ammon poli) is restricted to the Afghan Pamirs in the Wakhan corridor (Figure 1). This panhandle, originally created as a buffer strip between British India and Tsarist Russia is sandwiched between the Soviet Union and the Gilgit district of Pakistan.

Living above 4000 meters, the animals inhabit sedge meadows, alpine steppes and talus slopes. Like some other wild sheep (Geist 1971), the Marco Polo sheep is adapted to open terrain and rarely utilizes steep cliffs. Glaciers, however, are frequently used by both ram and ewe groups during the summer months. Petocz et al (1978) divided the population in the corridor into 3 parts on the basis of population characteristics and general movements:

The Big Pamir Segment

Seasonal concentrations occur in both the western and eastern ends of the Big Pamir. Valleys in between are infrequently used. In the west, sheep concentrations occur throughout most of the year. Major north-south movements which exclude females occur in this sector in winter between Afghanistan and the Soviet Union. In the eastern sector animal concentrations move east-west between Afghanistan and the Soviet Union from late June to October.

The Small Pamir Segment

In this segment the area north of Aksu River is utilized by the wild sheep. Female nursery groups use the area throughout the year with major concentrations occurring from June through January. Rams are found mainly during the pre-rut and rut (October through mid-January). Major seasonal movements are north-south between the Soviet Union and Afghanistan. Evidently little intermixing between the Big and Small Pamir sub-populations takes place.

The Waghjir Valley Segment

Although few data were available on the distribution of sheep in the area, local inhabitants reported concentrations of rams during summer months in valleys extending into China and the Soviet Union. Some animals were believed to move between Afghanistan and these countries.

Due to its isolation and value as a spectacular trophy, the Marco Polo sheep has been well protected in Afghanistan. Declared as a protected species through a royal decree by the former king, its hunting was banned without special permission from the Afghan Tourist Organization. As a result, the largest concentrations of the species probably occurred in the Afghan Pamirs

An estimate of its numbers in the Big and Small Pamir was made by Petocz (1978). The census indicated that about 1,300 animals lived in the 2 areas. Prior to the 1978 political upheaval, 12 hunting licenses were issued annually to foreign hunters for the Big Pamir segment. Although hunted in the Small Pamir by pastoral Kirghis, such activity did not cause significant demographic or social damage to the wild sheep population. The Kirghis, as a complete tribe, migrated to Pakistan in 1979.

The removal of over 50,000 head of Kirghis livestock from the Afghan Pamirs probably has benefited the wild sheep population through reduced competition for food resources. The present status of the animals in the Wakhan corridor, however, is unknown. According to press reports, the entire area has been sealed off from the rest of the country.

URIAL

The Urial (Ovis orientalis) prefers open country of rolling hills. A major portion of its range is composed of fairly dry alpine valleys and steppes ranging in altitude from 500-4000 meters.

At least 2 sub-species of urials are believed to occur in Afghanistan. The species ranges from the Zebak Mountains in the northeast to the Siyah Koh range in central Afghanistan (Figure 1). The Afghan urial (O. o. cycloceros) has the widest distribution of any native wild ungulate occurring throughout the Hindu Kush and Siyah Koh ranges (Habibi 1977). A disjunct population is found in the Feroz Koh chain near Herat and the Mughab River basin (Figure 2).

Considerable work is needed before the distribution patterns of urials in other parts of the country can be clarified. Sightings in 1976 of urials in the Zebak valleys confirmed their presence in that area. The extent of its range in other parts of Badakshan is not known. Near Kabul the urial is known only from specimens collected by hunters in the Lataband mountains. The Baluchistan urial (O. o. blanfordi) is believed to occur in the steppe country south of Ghazni but its distribution there has yet to be confirmed.

Insufficient data are available to assess the present status of this widespread species. Certainly Afghan urial must number in the thousands but population size of Baluchistan urial probably is much smaller in view of its limited distribution.

MARKHOR

The markhor (Capra falconeri) is limited to the eastern portion of Afghanistan. The most common of the 3 sub-species, the Kashmir markhor (C. f. cashmiriensis) is widely distributed in the Nuristan and Laghman monsoon forests (Roberts 1969, Petocz 1972) (Figure 3). Seasonal movements of the



Figure 1. Map of Afghanistan showing major mountain ranges and areas of mountain ungulate distributions.



Figure 2. Distribution of Marco Polo sheep (*Ovis ammon poli*) dark area and urial (*Ovis orientalis*) cross hatched.

animals are more altitudinal than otherwise. Exposed alpine slopes and steppes are used mainly during the summer months. In winter, the animals prefer the more sheltered coniferous forests at somewhat lower elevations, where a variety of browse species are available.

During the 1977 reconnaissance survey Petocz observed a total of 350 Kashmir markhor in western Nuristan (Petocz and Larsson 1977). Although the groups seen seemed to be only a small fraction of the animals present in the area, the markhor population there had been declining steeply during previous years (Caughley 1970, Schaller and Khan 1975). Goat herding in the alpine meadows and agriculture in the oak forests and valley bottoms evidently interfered with markhor movements. As traditional hunters, stalking has always been an important activity of the Nuristani peoples. Their hunting appeared even before 1978, to have decimated the Kashmir markhor population in several localized sections of its range.

Once widespread, the range of Kabul markhor (*C.f. megaceros*) has been greatly reduced during recent years. Its numbers have declined so low that the race is threatened with extinction. It is believed to survive now only in the Kabul gorge and the nearby Kohe Safi region (Petocz 1973). After a survey of the animal's range, Petocz (1973) reported that about 50-80 markhor survived in the Kohe Safi region. Only a few animals were believed to exist in other isolated pockets.

Little is known about the distribution of the Badakshan markhor (*C.f. heptneri*) in the far north Darwaz "peninsula". During the 1970's, about 150 of these animals were believed to survive in the western section of that district (Petocz, pers. comm.).

WILD GOAT

The range of the wild goat (*Capra aegagrus*) includes the barren mountains of Gezab and the headwaters of the Hilmand and Arghandab rivers extending towards the Siyah Koh range in central Afghanistan (Habibi 1977). No animals were observed in the Gezab range during a field survey in May of 1976 but local shepherds reported seeing a female group on steep bluffs in the Gezab Valley. Westward, the species is occasionally spotted in valleys forming the headwaters of Farah Rud (Figure 3).

Although no data are available on its numbers, hunting pressure and heavy grazing competition by livestock had reduced the population extensively even a decade ago. The species probably persists now only in small isolated bands in the most precipitous parts of its range.

IBEX

Two sub-species of ibex (*Capra ibex*) occur in Afghanistan. The alpine ibex (*C.i. ibex*) is found in large numbers in the Ajar Valley reserve of the central highlands (Shank et al. 1977). Forming an arc through the Hindu Kush it is seen as far northeast as southern Badakshan (Sultani, pers. comm.). To the west, it persists in the Feroz Koh mountains (Figure 4). Despite an influx of human settlements, it has managed to survive in the Kohe Baba range near



Figure 3. Distribution of markhor (Capra falconeri) dark areas and wild goat (Capra aegagrus) cross hatched.



Figure 4. Distribution of alpine ibex (Capra ibex ibex) cross hatched and Siberian ibex (C. i. sibericus) dark area.

Kabul. To the east it probably persists in isolated pockets in the forests of Spinghar range.

The Siberian ibex (*C. i. sibericus*) is distributed throughout the Wakhan corridor including the glaciated peaks south of Wakhan River and also in the Darwas "peninsula" and the alpine valleys of Zebak (Habibi 1977). Southward, it extends deep into western Nuristan (Figure 4). Extensive seasonal movements occur between Nuristan and the neighboring northern province of Badakshan (Petocz and Larsson 1977).

Well adapted to rocky terrain the ibex was abundant in several parts of its range a decade ago. About 5,000 animals were estimated to concentrate seasonally in the Ajar valley reserve (Shank et al. 1977). Although not censused, the Pamir population of the Siberian ibex was likely greater than 4,000 animals during the late 1970's.

CONSERVATION

The concepts of modern conservation are new in Afghan society. Ordinances dealing with the preservation of wildlife species and their habitat have been pronounced but are seldom enforced. With the majority of the population living in tribal areas, at least prior to 1978 most men carried arms and shot at any wild animals seen. In addition, floral communities have been modified by centuries of heavy grazing pressure by livestock (Frietag 1971). With only a small remnant of the original vegetation left in areas inaccessible to domestic stocks the country still faces the threat of widespread desertification. Wildlife and mountain ungulates in particular have been forced to take refuge in the most remote and steepest terrain of their serene habitat. There they doubtless are exposed to the most severe environmental hazards and harsh climatic conditions.

With the intensification of political turmoil in 1979, all wildlife work came to a standstill. Fighting was reported around the sanctuaries and reports reached Kabul of Soviet soldiers and the local population killing wild animals (Alexander 1980). The wildlife conservation program, which had taken years of planning and dedicated work to get established, was officially pronounced suspended in 1980. Assiduously hunted and with no effective means to enforce conservation the future of the country's wildlife seems to be facing gradual extermination.

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