

STATUS OF LARGE MAMMAL SPECIES IN KHUNJERAB NATIONAL PARK

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Abstract

Study on the current status of large mammals species population was carried out in Khunjerab National Park, Northern Areas. The observation recorded showed that the population of Tibetan Red fox (*Vulpes vulpes montana*), Snow leopard (*Uncia uncia*), and Wolf (*Canis lupus*) have, though a bit, increased but are still in the rank of "Endangered". While the population of Himalayan Ibex (*Capra ibex sibirica*) is increasing more rapidly and their status is now "Common" in the Park. The limited population of Marco Polo sheep (*Ovis ammon polii*), Tibetan wild Ass (*Equus hemionus kiang*) and Brown bear (*Ursus arctos*) is still under threat, and comes them under "Critical Endangered" category.

Introduction

The Northern Area of Pakistan having suitable climatic conditions and ecosystem quite rich in flora and fauna. Despite lack of scientific management and ruthless hunting wildlife in Northern Areas still support rare species of mammals and birds like Marco Polo sheep (*Ovis ammon polii*), Blue sheep (*Pseudois nayaur*), Markhor (*Capra falconeri*), Snow leopard (*Uncia uncia*), Himalayan ibex (*Capra ibex sibirica*), Black bear (*Ursus thibetanus*), Brown bear (*Ursus arctos*), Chakor (*Alectoris chukor*) and Ram chakor (*Tetraogallus himalayensis*) are some of the valuable possessions of this region.

The Khunjerab National Park was established in April, 1975. It is situated in upper Hunza about 269 km away from Gilgit district along with China boarder. It is located between 35° - 37° latitude and 73° - 75° E longitudes. It is one of the highest park in the world existing above 4000 m elevation. The main objective of the park is protection, multiplication and propagation of rare and endangered

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species like Marco polo sheep, Blue sheep, Himalayn ibex, Tibetan wild ass, wolf and Snow leopard besides providing them an undisturbed habitat.

Materials and Methods

- Photograph of existing species, Binocular/Spotting scope, Camera, Questionnaeres, Map of the Area, Field equipments i.e. Tents, torches etc.
- For the field survey of direct and indirect methods were adopted and survey was conducted from dawn to dusk.

Direct method: Included physical sighting of the animals with the help of binocular/spotting scope.

Indirect Method: Comprised animals signs, such as foot print, dropping, the Questioneries/interviews of the locals and hunters.

Results and Discussion

During survey different target species were observed at different vantage points. A freshly laid foot prints of Snow leopard, wolf and Himalayan ibex were also observed in different nullahs i.e. Dhee, Chapkarachenai and Furzindu nullahs. In Dhee nallah foot prints of snow leopard and cubs were also observed. A well found tracks of Himalayan ibex in different areas of the park were also observed.

The five years data from 1992-1998 showed a decreasing trend of Brown bear, Marcopolo sheep, Tibetan wild Ass. While in case of Himalayan ibex, Snow leopard, Tibetan red fox, Bule sheep and wolf the trend of population during the last five years is increasing.

The table shows that the population of Brown bear, Tibetan wild ass and Marcopolo sheep is gradually declining and over all their population is already less in the park.

The population of Marcopolo sheep is restricted to Karachani nallah of the park. and their estimated number is 87. The hunting pressure was high in the last

few years but now it is low.

Table 1. Observations on large mammalian species population of study area in 1998 determined from the data collected from shepherds and tourist guides.

Sl. No.	Species	Total No.			Total No.
		Male	Female	Kids	
1.	Blue Sheep	70	110	40	220
2.	Brown Bear	2	3	2	7
3.	Himalayan ibex	580	850	175	1605
4.	Marcopolo sheep	29	47	11	87
5.	Snow leopard	5	7		12
6.	Tibetan red fox	22	28	10	60
7.	Tibetan wild ass	4	7	4	15
8.	Wolf	21	22	8	51

Table 2. Main causes of decline of population (in %age) of Marcopolo sheep, Tibetan wild ass and Brown bear in the park area

Sl. No.	Causes of decline of population	Marcopolo sheep	Tibetan wild ass	Brown bear
1.	Illegal hunting/ poaching killing/ Trapping	20%	-	-
2.	Predators/diseases and other natural hazards (avalanches).	10%	20%	-
3.	Seasonal migration	30%	60%	-
4.	Habitat disturbance	40%	20%	50%
5.	Other reasons i.e. shyness Hibernation etc.	-	-	50%

The blue sheep is found mostly in upper shamshal nullah of the park, where local people hunt them. Hunting rate was also high in the last few years but still the population is increasing. The estimated population is reported to be 1500 to 2000 (Wegge 1989) and 2000 to 2500 (Rasool, G. 1998). The population of Blue sheep has increased to the extent that it is now desirable to harvest it under a well planning Trophy hunting programme in the Buffer zone located outside the limits of the National Park (Ghulam Rasool, conservationist Northern Areas per communication).

The total number of tibetan wild ass is also very low and the present estimated population of Tibetan wild ass is only 15.

The present status of Brown bear is also not good in the Park. Before construction of Karakoram Highway (KKH) its populations was desirable but now due to noise of heavy vehicles their population is rapidly declining in the park. The present estimated population of Brown bear in the Park is only 7. Therefore, the present status of the animals is categorized as critically endangered.

On the other hand the population of Himalayan ibex, snow leopard, Tibetan red fox and wolf is gradually increasing in the Park. The present population of Himalayan ibex is satisfactory and their age and sex ratio are also good, therefore, the population of Himalayan ibex in the park falls in common category.

The population of wolf, Snow leopard and Tibetan red fox is also increasing in the park but even then their number are very few. The present estimated population of wolf is 51. Snow leopard is 12 and Tibetan red fox is 60. Therefore the status of these animals falls in Endangered category.

The main causes of decline and increase in population of the animals are shown in the Table 2.

Table 3. Main causes of increase of population (in %age) of Himalayan ibex, Blue sheep, Tibetan red fox wolf, and Snow leopard in the Park.

Sl. No.	Causes of increase of population	H. ibex	Blue sheep	Snow leopard	Tibetan red fox	Wolf
1.	Sufficient protection	50%	60%	30%	30	40%
2.	Easy availability of food	30%	10%	50%	60%	50%
3.	Favorable climatic condition	10%	10%	20%	10%	10%
4.	Other reason i.e. by habitat improvement practices etc.	10%	20%	-	-	-

Recommendation

- Community based participatory approach.
- Community based Game Management and Habitat Protection
- Economic incentives to the local community.
 - Kerosien oil and low fuel consumption stoves on concessional rates.
 - Seeds of supplementary feed crop at subsidized rates.
 - Job opportunities to local people.
- Coordination with the Govt. of China.
- Coordination with social organization/NGO's.
- More trained staff appointment.
- Tourist facilities
- Training of the existing staff.

Conclusion

The increase in population of wildlife species in the study area are due to protection provided by the park officials, and the local communities, easy availability of food, favourable climatic conditions and habitat improvement practices by reseedling on pastures and afforestation practices.

The local villagers are largely in favour of wildlife conservation and willing to take part in participatory management for getting better result. It is recommended that plan should be strictly followed for achieving the already set objectives. The park staff should be given training in wildlife management and equipped properly.

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