

THE ASTORE MARKHOR

by

Ghulam Rasul.

Range forest Officer,
Gilgit.

The Astore Markhor (*Capra falconeri falconeri*) which is known as 'bom' locally, is the most important game animal of Gilgit Agency and Northern Area. It belongs to genus *Capra*, family *Bovidae* and sub-order *Artiodactyla*. The word Markhor is derived from the two persian words 'Mar' means snake and 'Khor' means eater the snake eater. The legend is that Markhor eats snake which is killed by the powerful strokes of its hoofs.

Distinctive Characters:—

The mature male Astore Markhor has great cock screw horns, which diverge widely and form an open spiral. Its Coat is of long gray hair almost to its knee. Markhor has a tufted beard and small yellow eyes. The upper part from head to tail is dark gray, the breast is light gray. During winter season its colour becomes rusty iron grey. With the advancement of the season, Astore Markhor sheds its hair and during the hottest season it becomes bare and seeks shelter in the dense forests or in the caves against the attack of horse-fly. The age of this animal is determined from each screw of its spiral horns. With the advancement in the age screws are added to the horns and each screw is about 9" in length. The record horn length of Markhor shot in Astor area is 53 inch. The life span of Astore Markhor is 18-20 years.

The mature females have straight horns of short size slightly bent towards the back. They are dark fawn with whitishgrey with a short beard which is located in the middle of chin. Females change colour from birth to maturity. When they cease breeding, the colour becomes dark-grey making it easy to locate them in the herd. The total number of rings on the horns of a female give its age in years because one ring is added annually to the horns.

Habits:—Except for the winter movements for shelter and food, Astore Markhor is non-migratory and generally remains within its habitat. In the hot summer months it approaches the alpine pastures, seldom going above snow line in the cold season it descends to low levels. Markhor takes shelter in the most inaccessible places in the rocks during night and starts grazing early in the morning. It rests and sleeps during the day rushing to the water points before sun set. It is a sensitive

animal with acute power of smell and hearing and a good eye sight. In danger, it gives loud alarming snorts and strikes its hoof against the stone to alert the herd.

Distribution:—

Astore Markhor has a wide range of distribution. Its natural habitat is 6000' above sea level and upwards, the zone of *Artemisia*-steppe and semi-arid open forests. This area comprises lower Astore beyond Mesekin Nallah on the right bank of Astore River, Kargah Nallah at Gilgit, area between Nomal and Nalter, Bagrote Nallah, Haramosh Nallah, Sai Nallah, Yasin and Gupis in the Political Districts, area between Nomal and Chalt, Chilas Darel and Tangir. Good heads of Markhor are still available in Astore area at Mushkin, Burmai, Mayardass, Shelter, Burduchi, Garay Nallahs, Chilas, Darel and Tangir. The predominating vegetation in this zone is *Artemisia maritima*, *Eurotia ceratolies*, *Kochia* species and *Astragalus* species *Juniperus macropoda*, *Fraxinus xanthoxyloides* and wild almonds, *Quercus ilex* and *Pinus gerardianii*. The ground is rocky and precipitous towards the upper limits. The slopes are gentle lower down.

Food:—

Astore Markhor eats almost all the grasses and bushes found in its habitat *Artemisia maritima* and *Fraxinus xanthoxyloides* are however much relished. In scarcity period the Markhor can live on leathery oak leaves and dead bark of Juniper trees. The young ones can be brought up on the milk of domestic goats. Markhor derives its salt requirements from saline earth and rocks.

Reproduction:—

Rut season starts with the advent of winter. The male and female herds get closer, mating starts on about 21st December and continues to the end of January, peak of rut is in late December. Males show no evidence of being territorial but they chase the intruders to the periphery or away from the estrous female. Except for the rut season the males and females remain separate. When the mating season is over the males become weak and try to remain aloof. They gradually move towards the upper limits while the females remain around till the breeding season is over.

The period of gestation is 5 months. Breeding starts from the last week of June to the end of July. Usually twins are born but only one young one is not uncommon. Fawns are able to walk soon after their birth and can be caught easily in the first week after which it is impossible to capture them. Young ones remain with their mothers till next mating. A female attains maturity and starts breeding after two years.

Cross Breeding:—

Astore Markhor cross breeds fairly well in captivity. The experiments carried out by Khan (6) in his reserve at Nalter have given encouraging results. He crossed the As-



Fig. 1 Astore Markhor (*Capra falconeri*)
(Photo by author)



Fig. 2 Hybrid 'Markhor' (F-1 generation)
(Photo by author)



Fig. 3 Hybrid 'Markhor' Goat with kids (F-2 generation)
(Photo by author)

tore Markhor (Plate. I) with the domestic goat. The resultant F-1 is seen in Plate. 2. It has inherited the fluctural characters and the modification is much. It has a stunted body and has lost spiral horns. Instead it has crescent shaped resembling Ibex. The male and female produced in the first generation were again crossed (intra-species hybridization) and the second generation is seen in (plate 3). Further observations on the F-2 generation are continuing.

Population Status:—

Before 1947 every Nallah Valley in Gilgit was full of Astore Markhor and numerous herds were seen moving from one place to the other during the rut season. At places it was a pest for the agricultural crops. With the increase in human population and the introduction of modern arms followed by the indiscriminate shooting its population has declined. The present population of Markhor is 1500 in the Gilgit Agency (2). In some protected areas the population is increasing.

Hunting Control:—

Astore Markhor has suffered much in the past due to indiscriminate shooting by the V. I. Ps. Hunting by 'Hunka' also named as 'Damdaruh' has been most destructive. Hunka is now banned. The control over the illicit shooting is inadequate. The Government has now transferred the Wildlife conservation from the Gilgit Scouts to the Forest Department in the Northern area.

Predators:—

Snow leopard (*Panthera uncia*) is the common predator of Astore Markhor but since the population of Markhor is declining snow leopard is also getting extinct.

Diseases:—

The common disease so far noticed is anthrax which is introduced by the domestic goats into the wild herds of Markhor (1).

Uses:—

The people have been shooting Markhor for food since times immemorial. Skins are used for making a footwear. The fine wool obtained from the Astore Markhor is used for making gloves and pullovers. The horns are used as trophies for decoration, tool handles, hookas, and bugle horns. The skin and horns also give a repellent smell which is said to keep the snakes away. It is an important game animal and attracts sports men from all over the world. The froth it ruminates is said to cure snake bites.

References:—

1. Mountfort Guy (1969). The Vanishing Jungle.
2. Khan, B. A. (1970) Pak. stan J. For. 20 (4), 1970.
3. Big Game Register of Gilgit Agency 1910-70.
4. The Jammu and Kashmir Game Preservation Act, 1998 Bikrimi.
5. Repp, G. I. Technical Report No. 6 Vegetation Studies in arid zones of river catchment in Karakoram.
6. Wing Commander Shah Khan. Markhor Breeding in Captivity (un-published).