The Himalayan Wildlife

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Charismatic mammals

The Himalaya, owing to its sheer vastness and characteristic environmental peculiarities, has given rise to and preserved a unique assemblage of wildlife (both plants and animals). Since formation of the Himalaya 30-40 million years ago, it has nurtured wildlife, the miraculous adaptations of which allowed them not only to survive, but thrive, even amidst the most inhospitable conditions on the planet. The Himalayan wildlife, thus, continue to impart the prowess of Mother Nature, on one hand, while its warmth and fragility, on the other. Together, they continue to inspire naturalists, artists, biologists and conservation practitioners throughout the world. While a glimpse of a species, as charismatic and elusive as the top predator of the Himalaya, the snow leopard, might be a life-time experience by itself; observing individuals of wild-goat, manoeuvring the precipitous cliffs, just to reach a patch of grass, teach us how they make an extremely tough and unforgiving life look so easy. The Himalayan wildlife is also unique in their widespread nature, with even large carnivores and wild-herbivores coexisting with humans across the Himalaya, unlike most other natural systems.

Although wildlife is pervasive in the Himalaya, confirmed records of occurrences are rare. Many of the readers of this Journal may be the lucky few in the world who get the chance to visit the remote valleys inhabited by these species and are best placed to contribute to science and conservation in the Himalaya. In this feature, we introduce some of the symbolic large animals that adorn the Himalaya.

Image 1 : Kee Monastery

The Spiti Valley, overlooked by the ancient Kee Monastery, is a stronghold for snow leopard and its primary prey, bharal and ibex. The Trans-Himalayan cold-desert landscape, although appears bleak and arid, supports a fascinating assemblage of large mammals, specially adapted to extreme climatic conditions and low forage availability.
Image 2:
Livestock of migratory herders grazing in the Chandra Tal Wildlife Sanctuary in Lahaul, Himachal Pradesh. The Chandra Tal is an international wetland conservation site (Ramsar site). In the Himalaya, livestock grazing is the most pervasive and persistent threat to snow leopard and its habitat, even inside protected areas.

Image 3: Snow leopard (Panthera uncia)
Snow leopard, one of the rarest members of the Cat family, is the top predator of the Himalayas. Owing to its large territory requirement and role as top-predator, snow leopard is the ‘flagship’ for conservation of the Indian Himalaya under the Environment ministry’s Project Snow Leopard. Only about 500 snow leopards survive in about 100,000 km² of potential habitat (3200 m - 5200 m) in India, at very low densities. Retribution killing due to depredation on livestock, decline in prey populations and climate change are the primary threats to the snow leopard and its habitat. Developmental pressures are rapidly emerging across the snow leopard habitat.

Image 4: Wolf (Canis lupus)
Wolf is an important predator in the Himalayas, co-occurring with the snow leopard. In addition to large ungulates, wolves prey upon smaller mammals, such as hare, marmot and pika, occasionally scavenging on snow leopard kills and garbage. A pack of wolf may have large home-range, travelling long distances in search of prey and shelter, usually hunting in open habitats. Wolf often comes into conflict with local communities due to depredation on livestock. Retribution killing continues to be a major threat to wolf populations. Widespread, yet patchy distribution and relative rarity are major challenges to studying and monitoring wolf.

Image 5: Red fox (Vulpes vulpes)
Red fox is the most widespread Carnivore species globally, occurring usually above 2000 m altitude across the Himalaya. A wide variety of food, such as small rodents, other small mammals, insects, worms, eggs, birds, fruit, scavenging the remains of prey killed by larger carnivores and also household waste constitute diet of red fox. Although versatile and apparently resilient to disturbances, intense human activity and competition with non-native predators, such as feral dog (stray dogs
depending largely on wild animals for survival), appear to be the
major threats to red fox populations. Red fox is vulnerable to disease
transmission from dogs.

**Image 6 : Bharal or blue sheep (Pseudois nayaur)**

Bharal is one of the primary wild prey of the snow leopard. Bharal
prefers undulating terrain, interspersed with cliffs, above 3000 m
altitude, occurring across the Himalayas, feeding mainly on grasses.
Livestock grazing is lowering population of bharal through reduction
in forage availability. Diseases transmitted from domestic livestock
also poses serious threat to bharal. Bharal is hunted in parts of its
distribution range for meat and cultural/spiritual purposes. Persecution
of bharal due to crop-raiding, fragmentation of habitat due to fencing of
agricultural areas and depredation by free-ranging dogs are emerging
threats to bharal.

**Image 7 : Himalayan or Siberian or Asiatic ibex (Capra sibirica)**

Ibex is the other primary wild prey of snow leopard, found in rugged
and cliff-dominated areas above 3000 m altitude. In India, ibex occurs
only in Jammu & Kashmir and Himachal Pradesh, not reported in areas
east of the Satluj river. Similar to bharal, ibex also faces competition
from domestic livestock, and is vulnerable to diseases transmitted from
livestock. Ibex distribution range faces particularly high migratory
livestock grazing pressure that has restricted ibex populations to sub-
optimal habitat, rendering patchy distribution and low densities. Ibex,
especially adult males, with huge sweeping horns, are hunted for trophy
and meat.

**Image 8 : Argali (Ovis ammon)**

Found in the gentle-rolling grasslands of the Tibetan Plateau, this wild-
sheep is reported from Ladakh and northern Sikkim in India. Argali is
primarily preyed upon by wolf and occasionally by snow leopard. Trophy
hunting, owing to the characteristic spectacular horns of adult males,
has decimated argali populations throughout its range since colonial
period. Argali faces strong competition from increasing populations of
domestic livestock, especially pashmina goats, through displacement
from preferred foraging areas and risk of disease transmission.
Ladakh urial (Ovis orientalis vignei)
This sub-species of urial, a wild sheep, occurs along the valley-bottoms of Indus, Shyok and Nubra rivers in Ladakh, feeding primarily on grasses and shrubs. Urial serves as an occasional prey to snow leopard. Owing to preference of very accessible areas, urial populations have been subjected to heavy hunting in the past, both for trophy and meat that has recently been controlled. Intense livestock grazing, irrigation, developmental projects and road construction have been rampant in urial habitat along major valley corridors. The future of urial in Ladakh is thus uncertain unless proactive conservation measures are taken in the human dominated valley-bottoms.

Tibetan gazelle (Procapra picticaudata)
This graceful antelope, locally called gowa, with a signature heart-shaped white rump-patch, is endemic to the Tibetan Plateau. Gowas inhabit rolling uplands, in small groups, feeding mainly on forbs and legumes. Wolf is their main predator. In India, gowa occurs in Ladakh and northern Sikkim. In Ladakh, gowa once occurred across about 20,000 km$^2$. However, over the past six decades, owing to hunting and severe competition with livestock, gowa’s range shrunk to 100 km$^2$ by the year 2006. Less than 100 individuals survive in the Hanle valley and Chumur in eastern Ladakh along with a few other unconfirmed scattered populations.

Kiang or Tibetan wild-ass (Equus kiang)
Kiang is a wild equid of the open terrain, inhabiting high plains, alpine-steppe meadows and broad valleys of the Tibetan Plateau. Ladakh and northern Sikkim have kiang populations in India. Kiang, owing to its large body-size, is rarely preyed upon by wolf, which usually hunt in packs. Kiang seasonally frequent areas near settlements and agricultural lands, coming into conflict with humans. Pastoralists perceive kiang to be a competitor of livestock, especially the prized pashmina goats, for forage.

Images : Nature Conservation Foundation, Snow Leopard Trust, Himachal Pradesh Forest Department and NCF field team.