

COMPARATIVE STUDY OF MAMMAL SPECIES OF JAMMU & KASHMIR AND PUNJAB: A CASE STUDY

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ABSTRACT

Wildlife study enables us to know about different animal species and other wild life species, how they interact with each other and with their ecosystem. It also enables us to know how important wildlife is for maintaining balance in ecosystem, their aesthetic value and scientific value. As part of the world's ecosystem, wildlife provides balance and stability to nature's processes. The goal of wildlife study is to ensure the survival of these species and to educate people on living sustainably with other species.

The present investigation is an attempt to study the comparison of wildlife of Jammu, Kashmir and Punjab. The study includes the different species of wild animals of Punjab and Jammu and Kashmir, the comparison is based on species present within Jammu, Kashmir and Punjab, for example, there are many differences between the mammal species found in Punjab and Jammu, Kashmir.

Also, their classification, Morphology, distribution and habitats reveal the major differences among the wild animals of Punjab and J&K.

KeyWords: Wildlife Study, Species, Habitat, Morphology, Distribution, Classification.

INTRODUCTION

Wildlife traditionally refers to undomesticated animal species, but has come to include all organisms that grow or live wild in an area without being introduced by humans. Wildlife can be found in all ecosystems, deserts, forests, rainforests, plains, grasslands and other areas, including the most developed urban areas, all have distinct forms of wildlife while the term in popular culture usually refers to animals that are untouched by human factors, most scientists agree that much wildlife is affected by human activities.

India is unique in having immense natural beauty, is its different lions and in possessing a rich and diverse wildlife. Indian wildlife is incomparable in its variety, for example, the Tiger, the Lion and the Leopard roam about in the same country, Elephants and the one horned Rhinoceros are found here in abundance. India had more types of the graceful deer and cats than any other country in the world. In fact, India

includes more than 120 families of terrestrial vertebrates has been estimated that there are more than 350 species of reptiles and more than 29,70,000 species of insects in India.

Humans have historically tended to separate civilization from wildlife in a number of ways, including the legal, social, and moral senses. Some animals however have adapted to suburban environments. This includes such animals as domesticated cats, dogs, mice and rats. Some religions declare certain animals to be sacred, and in modern times concern for the natural environment has provoked activists to protest against the exploitation of wildlife for human benefit or entertainment.

COMPARISON OF BEAR SPECIES FOUND IN PUNJAB AND J&K BEAR FOUND IN PUNJAB

Sloth Bear (*Ursus ursinus*)



Fig.1 Melurus ursinus

Classification Kingdom : Animalia Phylum: Chordata Class : Mammalia Order : Carnivora Family: Ursidae Genus: Melurus Species: ursinus Morphology Sloth Bears have shaggy, dusty black coats; pale short muzzles; and long, curved claws which they use to excavate termites and ants. A cream coloured V or Y shape usually masks their chests.

Distribution

Sloth Bears are present in India, Nepal, Srilanka and Bhutan. Until recently they were also known to occur in Bangladesh, but their continued existence there is uncertain. The last documented records are from the late 1990s.

Habitat

The sloth bear inhabits the tropical lowland forests of India, Nepal, Bhutan, Srilanka and Bangladesh and is sometimes found in tall grasslands that provide dense cover. [Dharaiya, N.; Bargali, H. S. & Sharp, T. (2020).]

BEAR FOUND IN JAMMU AND KASHMIR

The bear which is found in J&K is called as Brown Bear.

Brown Bear (Ursus Arctos)

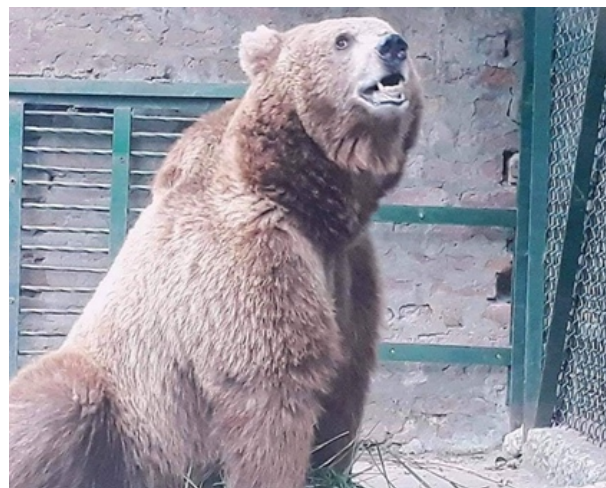


Fig.2 Ursus arctos

Classification Kingdom: Animalia Phylum: Chordata Class : Mammalia Order : Carnivora Family: Ursidae Genus : Ursus Species: arctos

Morphology

The brown bear has a slight hump above its shoulders, round ears, a long snout and big paws with long curved claws that it uses for digging. Unlike the black bear, it can't climb trees. It can weigh between 350 to 1500 pounds. When standing on its hind legs it can be up to 5 feet tall.

Distribution

The brown bear lives in the forests and mountains of northern America, Europe and Asia. It is the most widely distributed bear in the world. The world's largest brown bears are found in coastal British Columbia and Alaska and on islands such as Kodiak.

Habitat

Brown bears can be found in many habitats, from the fringes of deserts to high mountain forests and ice fields. In Europe, brown bear is mostly found in mountain woodlands, in Siberia it occurs primarily in forests while in northern America they prefer tundra, alpine meadow and coastlines. [McLellan, B.N.; Proctor, M.F.; Huber, D. & Michel, S. (2017).]

COMPARISON OF MONKEY SPECIES FOUND IN PUNJAB AND J&K. MONKEY SPECIES FOUND IN PUNJAB

The monkey species found in Punjab is called Rhesus Monkey. Rhesus Monkey (Macaca mulatta)

Classification Kingdom : Animalia Phylum : Chordata

Family: ceropithecidae Order : primates Genus: Macaca Species: mulatta



Fig. 3 Maccacamulatta

Morphology

Rhesus Macaques, both Chinese and Indian derived, range in color from dusty brown to auburn with little to no fur found on their reddish -pink faces. Their rumps are the same color as their faces and they have medium length tails that average between 207.6 and 228.9mm.

Distribution

Rhesus macaques are native to India, Bangladesh, Pakistan, Nepal, Myanmar, Thailand, Afghanistan, Vietnam, southern China and some neighboring areas. They have the widest geographic ranges of any non-human primate, occupy a great diversity of altitudes throughout central, south and South East Asia.

Habitat

Their habitat stretches from Afghanistan through India, Thailand, Vietnam and China.

Since they are extremely adaptable, they can survive the cold high mountain regions in the Himalayas as well as the dry and hot areas of the plains. Some rhesus monkey clans prefer rocky areas and coastal marshes as their habitat. [Singh, M.; Kumar, A. & Kumara, H. N. (2020).]

Monkey species found in J&K

The monkey species found in J&K is known as Kashmiri Grey Langur.

Kashmiri Grey Langur (Semnopithecus ajax)



Fig.4 Semnopithecus ajax

Classification Kingdom : Animalia Phylum: chordata Class : Mammalia Order: Primates

Family: Ceropithecidae Genus: Semnopithecus Species: ajax

Morphology

Langurs are largely grey (some more yellowish) with a black face and ears. Externally, the various species mainly differ in the darkness of the hands and feet, overall color and the presence or absence of a crest. Typically all north Indian grey langurs have their tail tips looping towards their head during a causal walk whereas all south Indian and Sri Lanka and grey langurs have an inverted U shape or S shape tail carriage pattern.

Distribution

The entire distribution of all grey Langur species stretch from the Himalayas in the north to Sri Lanka in the south, from Bangladesh in the east to Pakistan in the west. The bulk of the grey Langur distribution is within India, and all seven currently recognized species have at least a part of their range in the country.

Habitat

Grey langurs can adapt to a variety of habitats. They inhabit arid habitats like deserts, tropical habitats like rain forests and temperate habitats like coniferous forests, deciduous habitats and mountain habitats. [Groves, C. P. & Molur, S. (2008).]

Comparison of Leopard species of Punjab an J&K

The leopard found in Punjab is called as Indian Leopard (Panthera pardus). Indian Leopard (Panthera pardus)



Fig.5 Panthera pardus

Classification Kingdom : Animalia Phylum: Chordata Class : Mammalia Order : Carnivora Family: Felidae Genus : Panthera Species: pardus

Morphology

Compared to other wildcats, the leopard has relatively short legs and a long body with a large skull. Its fur is marked with rosettes. It is similar in appearance to the Jaguar, but has a smaller, more densely packed and without central spots. Both leopards and Jaguar's that are melanistic are known as black panthers. The leopard is distinguished by its well camouflaged fur, opportunistic hunting behavior, broad diet, strength and its ability to adapt to variety of habitats ranging from rainforest to steppe, including arid areas.

Distribution

The leopard has the largest distribution of all wildcats occurring in Africa, and Asia, although populations are fragmented and declining. Leopard populations on the Arabian peninsula are small and fragmented. In western and central Asia, it avoids deserts, areas with long snow cover and proximity to urban centers.

Habitat

Indian leopards are good climbers and rely on trees for cover, so are found in various forested habitats, including rain forests, dry deciduous forests, temperate forest and northern coniferous forest. [Nowell, K.; Jackson, P. (1996).]

Leopard found in J&K

The leopard which is found in J&K is called as snow leopard (Panthera uncia).

Snow Leopard (Panthera uncia)



Fig.6 Panthera uncia

Morphology

The snow leopard is a handsome animal with a thick coat of silvery fur marked with black spots. The underbelly and chest are white and the fur is longer to protect it from snow beneath. It has stocky limbs and huge paws, which gives it a stable grip on the slippery snow-covered ground and rocky ridges.

Distribution

The snow leopard can be seen in the Dachigam National park in Srinagar Jammu and Kashmir, on wild life tours with Kashmir tourism. The snow leopard lives in the high altitude regions of Jammu and Kashmir in regions over 3200 meters. It is also found in other Himalayan states of India and in high altitude areas in Nepal, Tibet, Bhutan, China and central Asia.

Habitat

Snow leopards live in harsh, snowy, rugged alpine regions in central and south Asia. They can be found at elevations between 3000 to 5000 meters across a total of 1 different countries. The ideal habitat of snow leopard is dangerous, cold and desolate. [McCarthy, T.; Mallon, D.; Jackson, R.; Zahler, P. & McCarthy, K. (2017).]

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