

ANIMALS IN INDIAN SUB-CONTINENT

Indian subcontinent has a rich and varied biodiversity to boast of. Infact, the country is home to some of the most rare as well as magnificent wild animals. Most of the wild animals of India are being protected from poaching as well as habitat loss through the numerous national parks and wildlife sanctuaries. Indian culture preaches respect for each and every form of life, including wildlife. Still, greedy individuals as well as the ever-increasing population are putting pressure on the peaceful existence of Indian wild animals. In this section, we have provided information on the following wild animals living in India:

Indian Asiatic Lion

Asiatic Lions once used to roam around the area, stretching from northern Greece, across Southwest Asia, to central India. However, today, the natural habitat of the majestic animal has been reduced to the Gir forests of India only, making the Asiatic Lion almost synonymous with the Indian Lion. Known scientifically as *Panthera Leo persica*, the royal animal is depicted on the National Emblem of India, since it represents power, strength and sovereignty. Gir National Park is the only remaining place in the world, where one is likely to see the Asiatic Lion.

Bengal Tiger

Bengal tiger is a subspecies of tiger, which is found in the Bengal region of the Indian subcontinent. One of the most common tiger subspecies, it is also found in a number of other Asian countries, like Bangladesh, Nepal, Bhutan, Myanmar, Tibet, etc. Usually Royal Bengal Tigers of India are reddish-brown to rust-brown in color with black stripes all over. However, a mutation may result in their color



being white also. Such a tiger is known as the White tiger. Bengal tiger is the national animal of both the Indian subcontinent as well as Bangladesh. One can visit Bengal Tiger to any Tiger Reserve in India.

Indian Leopard

Indian leopard is one of the 8-9 valid leopard subspecies found throughout the world. Known by the scientific name of *Panthera pardus*, it is the fourth largest of the four 'big cats' of the *Panthera* genus. At the same time, leopards are also the fifth largest of all cat species. The name 'Leopard' has been derived from a combination of two Greek and Latin words *leo* and *pard*, 'leo' meaning lion and 'pard' meaning panther. This name was given to the animal since it was initially believed to be crossbreed of a lion and a panther.

Indian Clouded Leopard

The Clouded Leopard (*Neofelis nebulosa*) is a medium-sized cat found in Southeast Asia. It has a tan or tawny coat, and is distinctively marked with large, irregularly-shaped, dark-edged ellipses which are said to be shaped like clouds. This unique appearance gave the

mammal both its common and scientific species name (Nebulosus is the Latin for “cloudy”). The Clouded Leopard was a confusion to scientists for a long time because of the appearance and skeleton. It was what seemed to be a cross in between a big cat and a small cat. The scientific name of the genus, Neofelis, originates from neo, which means “new”, and felis, which means “small cat”, so it literally means new kind of small cat.

Indian Snow Leopard

Snow leopard is a native animal of mountain ranges of central and southern Asia, including India. It is also known as Ounce and has a scientific name of "Panthera uncia". Snow leopards can live for a maximum of 18 years in then wild. In captivity, their lifespan increases to 20 years.

Indian Black Buck

Indian black buck is also known by a number of other names like Kala Hiran, Sasin, Iralai Maan and Krishna Jinka. The scientific name of the black buck antelope is Antelope cervicapra and it natural habitat is the Indian subcontinent. Grass forms the staple diet of the blackbucks. However, they do eat pods, flowers and fruits as supplements. The average lifespan of the Indian kala hiran is twelve years and at the maximum, they live for sixteen years. Black bucks are hunted by dogs and wolves.

Indian Black Bear

Indian black bear is also known by the names of Asiatic Black Bear (*Ursus thibetanus*), Tibetan black bear, Himalayan black bear and Moon bear. They grow to a length of approximately 4 to 6 feet, right from the nose to the tail. The small eyes of the bear, along with its rounded ears, a long snout, a large body, a short tail, and shaggy hair, differentiate it from the other types of bears. The small shoulder hump, a furry rear instep, a concave facial contour, small and curved claws and narrow ears further accentuate the difference. Last but not the least, Asiatic black bear also has a whitish V-shaped breast patch, not found in the other bear species of India.

The male black bear weighs between 220 and 480 pounds, while the females are 110 to 275 pounds in weight. The senses of the



Himalayan black bears of India are greatly developed and they boast of almost twice the hearing sensitivity possessed by humans. Black bears have colored vision and their eyesight is very sharp. Even their olfactory senses (ability to smell) are highly evolved. The mating season of the Himalayan black bears is usually from late May to early July. They give birth to two cubs at a time, which stay with the mother for almost seventeen months.

Indian Deer

The name 'Deer' is given to the ruminant mammals belonging to the family Cervidae. They are one of the most beautiful creatures on this earth and extend to approximately 34 species. Male deer, in India as well as the world, are known as stags, harts, bucks or bulls, depending upon the species to which they belong. While, the females are known as hinds, does or cows. One can find deers widely distributed throughout the world, including the Indian subcontinent. The only continents where deer are not found are those of Antarctica and Australia.

The 34 species of deer can be divided broadly into two categories, known as the old world group and the new world group. The former comprises of the subfamilies Muntiacinae and Cervinae, while the latter includes the subfamilies Hydropotinae and Odocoileinae. Read on to get more information about the Indian deer.

Nilgai

Nilgai, also known as Blue Bull, is one of the most commonly found wild animals of northern India as well as eastern Pakistan. Even though it is an antelope, it looks quite similar in appearance to an ox. Therefore, it has been given the name of Blue bull of India. The average lifespan of the Neelgai is 21 years.

Indian Gazelle

Indian Gazelle, also known as Chinkara, is a species of gazelle found in South Asia. It belongs to the Bovidae family and is scientifically known as *Gazella bennettii*. The life expectancy of a Chinkara is between 12 to 15 years, less than that of many other deer species. Male gazelles are believed to be territorial in nature and are not prone to wandering for large distances. Gazelles come across as very nervous animals and always seem to be on alert. It is believed that the dwindling population of Chinkaras is leading to a decline in the population of Cheetah, their main predators, in India.



Axis Deer

Axis Deer, also known as Chital Deer or Spotted Deer, is the native animal of the Indian subcontinent. It is found very commonly in India and is one of the most beautiful animals

in the country. The spotted deer of India was introduced in the state of Texas in the 1930s. Since that time, axis deer of India has become the most widespread of the entire deer species.

Swamp Deer

Swamp Deer, also known as Barasingha, is one of the most vulnerable species of deer of the Indian subcontinent as well as the world. Presently, one can find them only in the protected sanctuaries of India. Known by the scientific name of *Cervus duvauceli*, the swamp deer of India derives its name, Barasingha, from its large antlers.

Muntjac Deer

Muntjac Deer fall in the category of those deer that are shy and elusive. They are also known by the name of Kakad deer or the Barking deer in India. The reason for this name is their alarm call, which seems very much similar to the barking of a dog. Indian Muntjac deer counts amongst the ten subspecies of the Barking deer in the world.

Hog Deer

Hog Deer is a subspecies of deer, found in the areas stretching from Pakistan, through northern India, to mainland Southeast Asia. A population of the hog deer was introduced in a number of countries, including Australia, the United States and Sri Lanka.

Brow-antlered Deer

Brow-antlered deer are known by the scientific name of *Cervus eldii*. They have a number of other names also, like Eld's Deer, Sangai Deer, Thamin Deer and even Dancing Deer. The maximum lifespan of the Thamin deer of India is only ten years and the deer has three subspecies also.

Sambar Deer

Sambar Deer are dark brown in color and attain a height of 102 cm to 160 cm (40 to 63 inches). The weight of the sambar deer of India may touch 300 kg. There are chestnut marks on the rump as well as the underparts. Sambhur deer of India also have beautiful manes. However,

they are not spotted by birth. The spots develop gradually after birth.

Musk Deer

Musk deer comprise of one of the most endangered deer species, not only in the Indian subcontinent, but also in the whole world. They are classified as a subfamily of the Cervidae and have four sub-species.

Indian Elephant

Indian elephant, known with the scientific name of '*Elephas maximus indicus*', is a subspecies of the Asian Elephant. It is mainly found in the Indian subcontinent, that to in the scrub forested areas. The other countries where Asian elephants are found include Bangladesh, Bhutan, Borneo, Cambodia, China, Laos, Malaysia, Myanmar, Nepal, Thailand, Sumatra, and Vietnam. Since Indian elephants are very huge and can trample all other creatures, they have no natural enemies. Even lions, hyenas, and tigers attack only the very young elephants and not adults.

Indian Camel

The camels found in India are the single-humped camels, also known as the Dromedary camels. Long-curved neck, deep-narrow chest and a single hump characterize the Indian camel. The hump is used by the camels as reservoir of fatty tissues. In times of scarcity, the tissues are metabolized and the camel receives energy. The size of the hump is not the same in all the camels. It differs from one camel to another, depending upon its nutritional state. In times of starvation, the hump can get reduced to almost a non-existent size.

Indian dromedary camels have a heavy growth of hair on throat, shoulder, and hump, which is longer than the rest of the body. On an average, the camels in India live for a period of 40 to 50 years. They are widely used by the people of Rajasthan as a means of transportation. Infact, the camels are known as the 'Ship of the Desert'. They are used for carrying goods as well as people. Indian camels also provide humans with milk, meat, wool, leather and fuel (from their dried dung).

Hanuman Langur

Hanuman Langur is believed to be one of the Old World monkeys, belonging to the *Semnopithecus* Genus. They comprise of 15 subspecies and are terrestrial in nature. Earlier hanuman langurs were believed to comprise of a single species. However, now they are recognized as seven distinct species. Hanuman langur is also known by the name of Gray Langur, Entellus Langur and Common Indian Langur.

Golden Langur

Golden Langur, or Gee's Golden Langur, is known by the scientific name of *Trachypithecus geei*. An Old World monkey, it was first noticed by the scientific community in the 1950s only. In the Indian subcontinent, Golden langurs are found mainly in the foothills of the Himalayas, along the Assam-Bhutan border. The langurs are considered to be sacred by the Himalayan people. The coat of Indian golden langurs is covered with rich golden to bright creamish hair. The face is black and they have a very long tail, which may measure upto 50 cm in length.

Long Tailed Macaque

Long-tailed macaque is also known by some other names, like the Crab-eating Macaque or the *Cynomolgus* Monkey. It is an arboreal macaque, belonging to the *Macaca* genus, and has the scientific name of *Macaca fascicularis*. A native of the Southeast Asia, the Crab-eating macaque of India has also been flown into outer space.

Lion Tailed Macaque

Lion-tailed Macaque is one of the



subspecies of macaque, found only in the Western Ghats of South India. Known by the scientific name of *Macaca silenus*, it has life expectancy of 20 years in the wild and upto 30 years in captivity. Lion-tailed macaques spend most of their time on trees and are excellent swimmers.

Stump Tailed Macaque

Indian Stump-tailed macaque, also known as Bear macaque, is known by the scientific name of *Macaca arctoides*. It can reach upto a length of 70 cm, at the maximum, excluding the tail that may grow upto 8 cm in length. Indian Stump-tailed macaques weigh 6 to 13 kg and may live as long as 30 years.

Bonnet Macaque

Bonnet Macaque, an Old World monkey, is also known by the scientific name of *Macaca radiata*. Found only in India, it has been named so because of its physical appearance. Indian Bonnet macaques have a cap-like whorl of hair on their head, which radiates outward from the center. Since the coil of hair resembles a hat, they have been named as Bonnet macaques.

Assam Macaque

Assam Macaque is a diurnal primate, which inhabits the regions stretching from Nepal to Vietnam and Southern China. It is yellowish to dark brown in color and has a hairless face. The color of the face is red in case of adults. Assam Macaques are also known by the name of Himalayan Macaque and Hill Monkeys in India.

Rhesus Macaque

A typical macaque, the Rhesus monkey of India is believed to be one of the best species of the Old World monkeys. It is an excellent swimmer and enjoys water. Rhesus macaques are quite comfortable around humans and have the tendency to move from rural to urban areas in search of easy food. The average lifespan of Rhesus macaques is approximately 15 years in the wild.

Arunachal Macaque

Arunachal Macaque, scientifically known

as *Macaca munzala*, is a native primate of Arunachal Pradesh state of northeastern India. It is called by the local population as Munzala, meaning monkey of the deep forest. Arunachal Macaques were discovered by the Indian scientists in the year 2004 only.

Indian Red Panda

Red panda is a beautiful animal, found in only some other countries of the world, including the Indian subcontinent. Scientifically known as *Ailurus fulgens*, it is slightly bigger than the domestic cat and found a mention in the list of endangered species. Indian red panda bear is quite apt at climbing trees and is mainly herbivorous. It is also known as the Red fox or the Common panda and is native to the Himalayan ranges of India. A one of its kind animals, Red panda is believed to be a living fossil. The only other fossil close to the panda is that of *Parailurus*, which lived 3 to 4 million years ago. The lifespan of a Red Panda may range from nine years to fourteen years.

Indian Striped Hyena

Striped hyena belongs to the *Hyaenidae* family and is scientifically known as *Hyaena hyaena*. Strongly related to the Brown hyena, it is basically a solitary creature. The average lifespan of striped hyenas hovers somewhere around 10 to 12 years in the wild. When kept in captivity, they can live longer also.

Indian Rhinoceros

Indian Rhinoceros holds the distinction of being the fourth largest animal, after the three elephant species. Known by the scientific name of *Rhinoceros unicornis*, the animal is found in only two places in the world, Assam (India) and Nepal. The Great Indian rhinoceros is a brilliant swimmer and has an acute sense of smell and hearing. Its maximum speed reaches 55 km/h, that to for a short period of time.

Indian Wild Ass

Indian wild ass, also known as khur, is one of the subspecies of wild ass belonging to southern Asia. Its scientific name is *Equus hemionus khur*. Wild ass of India has an average age of 20-25 years.



Indian Wild Boar

Wild boar is considered to be the wild antecedent of the domestic pig of the Indian subcontinent. It belongs to the Suidae biological family, which also includes the Warthog and Bushpig of Africa, the Pygmy Hog of northern India and the Babirusa of Indonesia. Indian wild boars are also quite closely related to peccary or javelina of North, Central and South America.

Pangolin or Scaly Anteater

Habitat: Variety of habitats - forests, hills, cultivated land, rocky crevices. Found in much of Eastern and Northern India and in Tamil Nadu and Kerala also.

National Parks: Found in many National Parks.

Status in the Wild: Near Threatened

Chinkara

Habitat: Grasslands and dessert

National Parks: Kutch Dessert Wildlife Sanctuary, Gujarat, Gir National Forest, Gujarat

Status in the Wild: Least concern.

Nilgiri Tahr

Habitat: Hills of southern India at elevations of about 1,800m (6,00 ft.)

National Parks: Eravikulam National Park, Kerala

Status in the Wild: Endangered

Indian Flying Fox

Habitat: This species roosts in large colonies of hundreds to thousands of individuals on large trees in rural and urban areas, close to agricultural fields, ponds and by the side of roads. It feeds on a wide variety of fruits and flowers, both wild and cultivated. A single young is born between April to early June. It travels long distances, up to 150 km to and from its roost, a night in search of fleshy berries.

National Parks: Point Calimere Wildlife Sanctuary in Tamil Nadu, Palamau Tiger Reserve and Hazaribagh Wildlife Sanctuary in Jharkhand, Kawal Wildlife Sanctuary in Andhra Pradesh, Molem National Park in Goa, Kanha National Park in Madhya Pradesh, Chilka (Nalaban) Wildlife Sanctuary in Orissa and Indravati National Park in Chattisgarh.

BIRDS IN INDIA

India is one of the 12 megadiversity countries of the world. There are numerous species, the potential of which is not yet known. Nearly 95 % of the medicines used in the traditional treatment in India are plant based. India's land mass is 2.4 % of the total land area on this planet but its contribution to world's biodiversity is app. 8% of the total number of species.

India ranks tenth in the world & fourth in Asia in plant diversity and ranks tenth in the number of endemic species of higher vertebrates in the world. India has 10 biogeographical zones and has 6 types of natural habitats. Over 47,000 species of plants and 89,000 species of animals have been recorded in India. Out of 4700 species of plants, 5150 are endemic to India.

To protect & conserve its rich flora and fauna, 12 biodiversity rich areas have been designated as Biosphere Reserves. 5 sites in India fall under the preview as World Heritage sites under the World Heritage Convention. Among the 18 hot spots in the world, two are in India namely The Eastern Himalayas and the Western Ghats.

India has over 350 species of mammals and over 1225 forms of birds, some of them are endemic to India only. Some of the unique species found in India are Golden Langur,

Namdapha flying squirrel, Lion tailed macaque, Nilgiri Langur, Nilgiri Tahr, Flying Squirrel, Malabar Grey Hornbill, Asiatic Lion, Nilgai, the Spiral Horned Black Buck, the four horned Chausingha.

To protect this unique wildlife India has earmarked app. 4.2 % of the total geo-area for conversation. A protected area network of 85 National Parks and 448 wildlife sanctuaries have also been created.

Avifauna of India

India, one of the 12 megadiversity countries, is very rich in biodiversity. Over 1200 species of birds comprising at least 13 % of the world's birds are found in India. Biogeographically, India is situated at the tri-junction of three realms namely Afro-tropical, Indo-Malayan and Paleo-Arctic realms, and therefore, has characteristic elements from each of them. This assemblage of three distinct realms probably is a fact which is believed to partly account for its rich and unique birdlife.

One of the main reasons for high density of birdlife in India is presence of diverse biographical zones classification of which has been attributed to Rogers and Pawar (1990). We take this classification to describe the avifauna of India.

1. Trans-Himalayas : An extension of the Tibetan plateau, harboring high-altitude cold desert in Ladakh and Lahaul Spiti comprises 5.7 % of the country's landmass. This area has many

high altitude lakes and flat plains and serves as an important breeding ground for birds like Black-necked cranes, Bar-headed geese, Great Crested Grebe, Tibetan Sandgrouse, Horned Lark, The Tibetan Snowcock, Himalayan Griffen and Wheatears etc.

2. Himalayas: The entire mountain chain running from north-western to north-eastern India, comprising diverse range of biotic provinces and biomes covers 7.2 % of the country's landmass. Out of 49 species of pheasants, 18 are found in the Himalayan region (Ali & Ripley 1987). Important species are Western Tragopan, Satyr Tragopan, Blyth's Tragopan, Temminck's Tragopan, Monal Pheasant, Sclater's Monal, Tibetan Eared Pheasant, Cheer Pheasant, Blood Pheasant, Kalij Pheasant, Koklass Pheasant, Red Jungle fowl. One other species found is the Ibisbill.

The Western Himalayas is rich in its birdlife and some 500 species of birds are found in this region. The other hotspot area is Eastern Himalayas, one of the richest bird areas in India where some 536 bird species have been identified (Ali 1977).

3. Desert: The extremely arid area west of the Aravalli hill range, comprising both the salt desert of Gujarat and the sand desert of Rajasthan covers 6.9 % of the country's landmass. The Thar Desert is one of the smallest



deserts in the world, but it has a wide variety of habitats and biodiversity. Some 250 to 300 species of birds have been reported from this area. Some of the important species to be seen are highly endangered Great Indian Bustard, the migrant Houbara Bustard, various species of Sandgrouse, raptors, wheatears, larks, pipits & munias. Rann of Kutch acts as important breeding ground for both Greater and Lesser Flamingo's.

4. Semi-arid: The zone between the desert and the Deccan plateau, including the Aravalli hill range falls under this. This region has a sizable population of finches, munias, larks, doves & pigeons. Some of the species seen are the Green Munia, the Rock Bush Quail, Malabar Crested Lark, the Syke's Crested Lark, the Indian Chat and the highly endangered the Lesser Florican.

5. Western Ghats: The hill ranges and plains running along the western coastline, south of Tapti river, covering an extremely diverse of biotic provinces and biomes falls under this. One of the two hot spots of India, this area has around 500 species of birds including 16 endemic species found in this area only. Some important birds of the Western Ghats are Wynaad Laughing Thrush, Nilgiri Laughing Thrush, Nilgiri Pipit, the Broad-tailed Grass-Warbler, Nilgiri Wood Pigeon, Malabar Grey Hornbill.

6. Deccan Peninsula: The Deccan Peninsula has some of the finest Dry Deciduous Forests, particularly in Madhya Pradesh, Orissa



Great-Indian-Hornbill

and Maharashtra. Some important bird species found in this region are Grey Jungle Fowl, Painted Francolin, Rock Bush Quail, Yellow-throated Bulbul, highly endangered Forest Owlet, Jerdon's Courser, Green Munia, the Lesser Florican & the Great Indian Bustard.

7. Gangetic Plains: Defined by the river Ganges, these plains are relatively homogenous. This region is famous for its flood plain wetlands and the marshes. Some of most important wetland birding areas are found in this region. The bird species to be seen are Marsh Warbler, Bristled Grass-Warbler, Rufus-rumped Grass-warbler, Yellow-bellied Prinia, Swamp Francolin, Bengal Florican, many types of ducks and threatened species like painted Storks, Black-necked Stork, Black-headed Ibis & Black-bellied tern.

8. North-East India: North East India is one of the two hot spots of India and covers 5.2 % of the land mass. This area has some 5800 plant species out of which around 2000 are endemic. At least 55 flowering plants are endemic to this area and is known for the origin of 5 palms of commercial importance namely, coconut, arecanut, palmgra palm, sugar palm & wild date palm. 63 % of the genera of land mammals in India are known from this area and more than 60 % of India's birds are recorded in North East. Some important birds of this region are Spot-billed Pelican, Oriental White Stork, both Greater and lesser Adjutant, White-winged Duck, Pallas Fish Eagle, Swamp Francolin, Manipur Bush-Quail, Green Peafowl, Purple



Great-Indian-Bustard