

# A Study on the Flora and Fauna of Jim Corbett, Nainital

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**Abstract – National Parks have their distinct flora which comprises the freshwater flora and alpine flora. The prominent alpine flora includes Sal forests, Chauras, Khair-Sissoo forests and much more. The river plants on other hand have its own distinctive hierarchy. There are over 600 species of trees, shrubs, herbs, bamboos, grasses, climbers and ferns in the Jim Corbett National Park.**

**Some of the ubiquitous trees in Corbett are Sal, Sissoo and Khair. Many other species that contribute to the diversity here, are found scattered throughout the park. Pine (Chir) is the only conifer found in premises of the park and is found on ridge-tops like ChinChoti, though at Gajar Sot, its density becomes quite low. On the elevated levels near Kanda, Banj Oak is easily seen, which is truly a Himalayan species. Prominent Palm species are Date Palms found in the open and well-lighted areas. Kanju (Holoptelia integrifolia), Jamun (Syzygium cumini) and Amla (Emblica officinalis) are seen in the moist areas. Other tree species comprise Bel, Kusum, Mahua and Bakli.**

**Keywords: Flora, Fauna, Animals**

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## INTRODUCTION

Jim Corbett gets its color tone from the flowering trees, which include Kachnar (*Bauhinia variegata*) with pink and white flowers, Semal (*Bombax ceiba*) with big red blooms, Dhak or the Flame-of-the-forest (*Butea monosperma*) with bright orange flowers, Madaar or Indian Coral (*Erythrina indica*) with scarlet red flowers and Amaltas (*Cassia fistula*) with bright yellow chandelier-like flowers.

Artificially implanted tree species comprise Teak (*Tectona grandis*), Eucalyptus, Jacaranda, Silver Oak, and Bottlebrush, respectively. There are over 70 known and registered species of grasses in Jim Corbett National Park, which inhabit different regions, especially the Chauras. The species include Kanshi, Themeda arundinacea, Baib or Bhabar, Narkul, Tiger Grass, Khus Khus, and Spear Grass with conspicuous sharp blades that stick to clothes and easily find an entry to the skin.

Male Bamboo is a prominent species of bamboo inhabiting the Jim Corbett area. The tree has clustered stout stems as well as shining papery stem sheaths. All the bamboo trees flower together and after flowering, fruiting and seed dispersal, all suffer quietus.

Shrubs dominating the Jim Corbett National Park comprise Ber, which is found in well-lit areas. Maror phali is also quite a conspicuous shrub to be found in

Jim Corbett National Park. Its fruits can be seen in the form of twisted spiralling pods. Karaunda is a shrub which bears pinkish-white flowers and sour fruit, and is quite evident under Sal. Hisar shows yellow, juicy, berry-like fruits that are relished by animals. Jhau, on the other hand, has high density along the Ramganga basin growing in sandy or rocky soil.

## FAUNA IN JIM CORBETT NATIONAL PARK

Leopards can be easily located in the hilly areas but can also be seen around in the lowland jungles. Smaller-size feline population comprises the Jungle Cat, Fishing Cat and Leopard Cat. Other mammals inhabiting Jim Corbett National park includes deer species (Barking, Sambhar, Hogg and Chital), Sloth bears and Himalayan Black bears, Indian Grey Mongoose, otters, Elephants, Yellow Throated Martens, Ghoral (Goat-Antelopes), Indian Pangolins, and Langur and Rhesus Monkeys. Tourists can also spot Owls and Nightjars during the night. Local crocodiles (along with the banks of the Ram Ganga River) and Indian Python, King Cobra, Common Cobra could also be seen in the Jim Corbett Park.

Corbett National Park was the first Tiger Reserve under the project in India. So from that point of view Corbett is one of the oldest as well as the largest national park of India. The park is an ideal home for many majestic animals like the Royal

Bengal Tiger, Asiatic Elephant and many other wild animals.

Due to healthy population of wild today, Corbett is one of best preserved parks with 164 numbers of tigers and over 600 elephants. As per the recent survey Corbett reveals the highest density of population of tigers in the country at 20/100 square kilometers.

Apart from Royal Bengal Tiger Corbett is also a home to a sizeable population of the endangered Asiatic elephant and other critically endangered species including the Ghariyal. Some of the other known mammal species reside in Corbett include Asiatic Black Bear, Hog Deer, Walking Deer, Sambar, Sloth Bear, Yellow-throated marten, Otters and many more to list. Corbett also hosts a diversity of aqua fauna and birdlife with approximately 600 species including the great pied hornbill, white-backed Vulture, Hodgson's bushchat, orange breasted green pigeon, Pallas fish eagle, golden oriole, tawny fish owl, Indian Pitta, Scarlet Minivet and reptile like the critically endangered Ghariyal, mugger Crocodiles, the king Cobra and many more to list.

The tiger is not only the star attraction of the Jim Corbett National Park but is the most celebrated of the wild animals in India. This wonderful creature of God symbolizes the power of nature and finds an important place in our culture, mythology and legends. The majesty has been treated and worshiped as the ruler of the forest.

It is said that tigers have evolved in East Asia (China) about two million years ago. After that they spread to other parts of Asia. Altogether there are eight subspecies of tiger, out of which three have gone extinct. It is a matter of pride for India that the country gives shelter to the largest population of wild tigers in the world. According to recent census it has been estimated to be only 5000 to 7500 tigers surviving in the world. The subspecies Royal Bengal Tiger has 3000 to 4500 surviving members existing in Indian subcontinent, more than three-fourths of which are in India.

The Terai-Bhabar region, including the area of Corbett National Park was once the best habitat for tigers but recently has reduced at great extent due to deforestation took place in these areas and land use changes.

The tiger has always had a deep relation with the confined area of Corbett National Park - either through the useful writings of Jim Corbett and other hunter. Corbett gave birth to Project Tiger in India - India's first tiger conservation program inaugurated on first April 1973.

Tigers attack wild boar, deer (preferably chital and barking deer) and Sambar while the majestic is on

hunt. They choose the largest prey of species since larger prey gives more energy for the energy spent. The presence of sound population of sambar is believed to be a good indicator of the presence of tigers in the Corbett. Sometimes, tigers also hunt young of elephants and take smaller species, including birds, reptiles, fish and monkeys.

Tigers in India have the greatest reputation as man-eaters among the large cat species. Such tigers have been immortalized through the writings of Jim Corbett. For instance, The Champawat Tiger is said to have killed 434 people before Corbett finally succeeded in killing it.

Tiger is kept on top of the food pyramid as they are carnivore and a master predator. It helps in maintaining and controlling the ecological balance of the park.

## FLORA IN ZIM CORBETT

The different habitat types of Corbett i.e. mountains, sal forests, chaurs, khair-sissoo forests, and rivers have their distinct assemblage of plants. More than 600 species of trees, shrubs, herbs, bamboos, grasses, climbers and ferns have been identified in the Park.

### Trees

The most visible trees found in Corbett are sal, khair and sissoo (see Habitats and Ecosystems). Many other species that contribute to the diversity, are found scattered throughout the park.

### Chir pine (*Pinus roxburghi*)

Is the only conifer of the Park and is found on ridge-tops like Chir Choti but comes quite low in Gajar Sot. The upper reaches near Kanda have Banj Oak (*Quercus leucotrichophora*) growing which is essentially a Himalayan species.

### Palms

Include Khajur or Date-palm (*Phoenix* sp.) that occurs in open areas. *Wallachia densiflora* is a rare palm characteristic of Eastern Himalayas but is found in Corbett near Sultan.

### Flowering trees

Lend colour to the forests in Corbett. The main ones are Kachnaar (*Bauhinia variegata*) with pink to white flowers, Semal (*Bombax ceiba*) with big red blooms, Dhak or Flame-of-the-forest (*Butea monosperma*) with bright orange flowers, Madaar or Indian Coral (*Erythrina indica*) with scarlet red

flowers and Amaltas (*Cassia fistula*) with bright yellow chandelier like blooms.

Some species of trees that do not occur naturally in the Park have been artificially planted in and around habitation. These include Teak (*Tectona grandis*), Eucalyptus, Jacaranda (*Jacaranda mimosaeifolia*), Silver Oak (*Gravillea robusta*) and Bottlebrush (*Callistemon viminalis*), and can be seen in and around forest rest houses.

### Shrubs

Flowers of Helicteris Shrubs dominate the tree understory and scrub areas. There are several species of Ber (*Zizyphus* sp.) in open areas and provide food and habitat to many birds and animals. Maror phali (*Helicteres isora*) is an easily noticeable shrub. Its fruits are in the form of twisted spiralling pods. Karaunda (*Carissa* sp.), with pinkish-white flowers and sour fruit, is found under sal. Hisar (*Rubus ellipticus*) has yellow, juicy, mulberry-like fruits that are savoured by animals.

Jhau (*Tamarix dioica*) is found along the Ramganga basin on sandy or rocky soil. Colebrookia oppositifolia and Adhatoda vasica are found in nallahs.

### Bamboo

In some parts of Corbett the vegetation is dominated by bamboo forest. The main species is Male Bamboo (*Dendrocalamus strictus*) having clustered stout stems and shining papery stem sheaths.

Bamboos follow a peculiar flowering process. All bamboos in a forest flower together at the same time once in several decades. After flowering, fruiting and dispersal of seeds, all individuals die together.

### Herbs

Herbs include many species of wildflowers belonging mostly to Pea and Aster families. They are most visible on grasslands or chauras and on open areas.

Drymaria diandra is a spreading annual herb with heart shaped leaves and occurs in moist shady places. Bhilmora (*Rumex hastatus*) is a sour tasting herb used for making chutney. Other species encountered in Corbett are Euphorbia hirta, a hairy herb, Indigofera linifolia with bright red flowers, Clover (*Oxalis* sp.) with three leaflets, Solanum sp. and Leonotis nepetalifolia (orange flowers and spiky round fruits).

### Grasses

Corbett has over 70 grass species. Grasses form the largest group of plant species in Corbett with more than 70 species recorded. They occupy different habitats, especially chauras.

They include Kanshi (*Saccharum* sp.), Themeda arundinacea, Baib or Bhabar (*Eulaliopsis binata*), Narkul (*Arundo donax*), Tiger Grass (*Thysanolaena maxima*), Khus Khus (*Vetiveria zizanioides*), Cymbopogon flexuosus (a tufted grass with pleasant aromatic leaves), Aristida cyanantha (found amidst boulders), Neyraudia arundinacea (with light brown inflorescence) and Heteropogon contortus (Spear Grass with conspicuous sharp blades that adhere to clothes and penetrates skin).

### Woody climbers

Woody climbers found in the park are Millettia auriculata, Cryptotepris buchmanii, Porana paniculata (dense canopy with profuse white flowers), Clematis gouriana (shrubby twiner with tendril like branches) and Bauhinia vahlii (flat rusty hairy pods, large leaves used for making pattal).

### Epiphytes and orchids

Epiphytes are plants that grow above the ground on other plants, and derive nutrients and water from rain, the air, dust, etc. They are found on sal and other trees in the park.

They include Dendrophthoe falcata (scarlet red flowers), Scurrula cordifolia (hairy coating on shoots and leaves), Vanda testacea (orchid with flat keeled leaves and beautiful spike flowers), Cuscuta reflexa (or 'Dodder', with interlaced yellow cord like habit, growing on shrubs).

### CONCLUSION

One of the well-known species of animals inhabiting Jim Corbett is the Royal Bengal Tiger. It was in the forests of Jim Corbett that India's tiger conservation program was initiated on 1st April 1973. There was a time when there were many man-eating tigers which dominated the Terai-Bhabar region. However, with a recent decline in the population of tigers, the attacks on tigers have become quite a rare occurrence. Adult tigers could be seen as solitary wanderers to the tourists, whereas tigresses could be spotted with young cubs.

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