



NATIONAL TIGER CONSERVATION AUTHORITY / PROJECT TIGER

Statutory Body under the Ministry of Environment, Forests and Climate Change
(Government of India)

Corbett Tiger Reserve

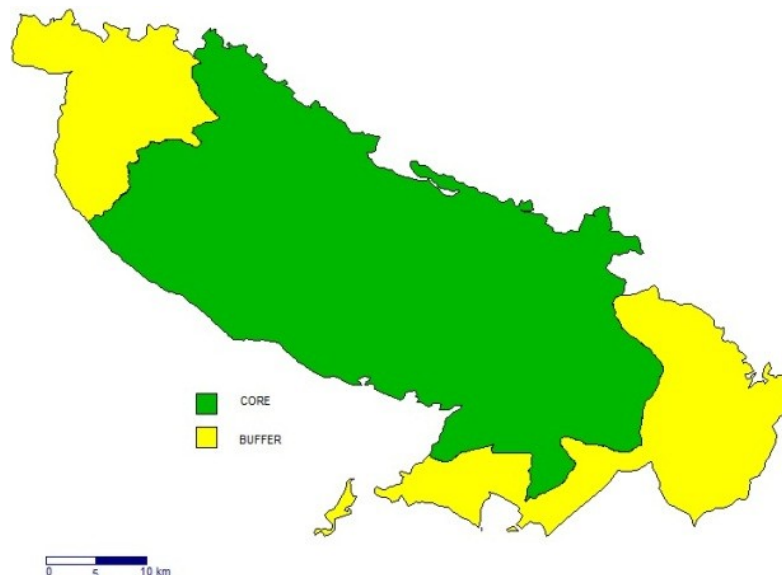
Corbett is located on the foothills of Himalayas in Uttarakhand, spread over three districts, viz. Pauri, Nainital and Almora. The terrain is undulating with several valleys. The rivers Ramganga, Pallaen and Sonanadi flow through the valleys. By and large, the reserve is spread over Bhabar and lower Shivalik region with a deep water table. The tract is porous with boulders and sand deposits.

Area of the tiger reserve

Core/critical tiger habitat	:	821.99 sq.km.
Buffer/peripheral area	:	466.32 sq.km.
Total	:	1288.31 sq.km.

Location

Latitudes : 29⁰ 25' N to 29⁰ 40' N
Longitudes : 78⁰ 05' E to 79⁰ 05' E



Habitat Attributes

Flora

The floral composition of the habitat is given below:

North Indian tropical moist deciduous forests: Moist Shivalik Sal, Moist Bhabar dhun sal, Moist mixed deciduous, alluvial savannah woodland.

Northern tropical dry deciduous forests: Dry Shivalik sal, dry bamboo brakes, Shivalik chir pine forests, Grasslands & old plantations.

In general, the vegetation comprises of sal and mixed forests, interspersed with grasslands and riparian vegetation. There are more than 110 tree and 51 shrub species.

The habitat is characterized by open meadows (chaurs) interspersed with sal and moist mixed deciduous forests. The grasslands are locally known as 'Chaur', which are an outcome of abandoned settlements or past clearings. There are several important chaurs abundant in wildlife: Dhikala, Phulai, Khinnanauli, Paterpani, Mohanpani, Bhadhai and Bijrani. Such grasslands constitute almost 20% of the old National Park area of the core. Owing to their anthropogenic origin, these meadows are gradually getting colonized by gregarious woody species. There are several old plantations of the sixties and seventies, which include species like teak, *Eucalyptus*, *Ailanthus* and sisso. However, such plantations are largely confined to the buffer area of the reserve. Several invasive weeds like *Lantana* and *Cannabis* are prevalent in the habitat.

Fauna

The faunal diversity is tremendous and around 40 threatened species have been documented (4 critical, 10 endangered and 26 vulnerable). Tiger and elephant are the charismatic mammals, besides a large array of co-predators (leopard, small carnivores), ungulates (sambar, hog deer, spotted deer), birds, reptiles (gharial, crocodile) and fishes.

Tiger Status

The reserve has the highest tiger density in the country and is an important tiger source area for the entire landscape. As per the 2010 country level assessment using the refined methodology, the tiger estimate for the Corbett landscape is 227 (ranging from 199-256) with an increasing trend. The forest divisions surrounding the reserve like West Terai, Lansdowne and Ramnagar divisions also support resident tigers. Based on advise from the National Tiger Conservation Authority, some such areas have been incorporated in the buffer of the tiger reserve. Further, the State is also supported for day to day patrolling and tiger monitoring in such areas.

Core

There has been a significant reduction in the anthropogenic grasslands owing to submergence under Kalagarh Dam, besides gregarious growth of woodland species. This changed ecological setting has dispersed the hog deer population to small pockets. The elephants also contribute towards manipulation of the habitat by bringing down the woodland species. The presence of gujjar settlements results in considerable biotic pressure within the core which require voluntary relocation on a priority basis under Project Tiger. Likewise, removal of weed requires attention giving due consideration to the existing carrying capacity of the habitat in the context of tiger.

Buffer

The buffer area has been brought under the administrative control of the tiger reserve management in the recent past and comprises of forests subjected to past working for timber exploitation, besides plantations. The forestry operations at present are not intense and only extraction of dead and fallen timber by the Uttarakhand Forest Development Corporation has been permitted. There are few villages in the buffer zone, besides a large number (around 46) of abandoned revenue patches ('chacks' and 'khattas'). However, the periphery of the buffer has many villages and human-wildlife interface issues and conflicts are numerous and frequent. Such areas have heavily used public infrastructure in the form of roads, markets, electrical transmission lines and related development. The tourism is confined largely to the eastern and southern boundary of the reserve with a large number of tourism related infrastructure.

Corridor

The corridor connectivity with the Rajaji National Park is crucial. Its fragmented and disturbed status calls for urgent recovery inputs with a multiple use management involving local people. The corridor linkages with Lansdowne, Ramnagar, Haldwani and Pilibhit (Uttar Pradesh) forest divisions are also important, which requires fine tuning of management in such areas with a focus on tiger monitoring. The other important corridors are Kansrao-Barkot between Rajaji National Park and Dehradun forest division; the connectivity of Laldhang forests which linked Rajaji to Jhilmil Tal, besides the Chila-Motichur linkage.

The Rajaji-Corbett corridor has two sub-corridors, viz. one through the Shivalik Hills of the Lansdowne forest division, and another through the Shivalik foothill forests of Haridwar and Bijnore forest divisions connecting Rajaji to Corbett (Sonanadi). The development around Kotdwar township is impacting this connectivity. The Kosi corridor linking the Ramnagar and Terai / Haldwani forest divisions is also important which has been impacted by the development around Ramnagar. The linear development of tourism infrastructure along the highway from Ramnagar to

Almora on the banks of Kosi has impacted the habitat matrix. Only two corridor connections exist at present, viz. near Garjia temple and the other from the Bijrani gate of Corbett to Kosi river and beyond. These are vital gene flow linkages. The corridor connectivity around Haldwani and Gola river have been severely fragmented. The corridor linkages in Terai East (Kilpura and Khatima-Surahi) are also important for ensuring gene flow with Nepal and Dudhwa landscape of Uttar Pradesh.

Managerial Issues

Since the Corbett landscape has high tiger density, monitoring tiger source populations in Corbett and surrounding divisions is an important issue. The ongoing M-STrIPES and Phase-IV monitoring in Corbett should be mainstreamed in the adjoining divisions with creation of camera trap tiger ID data base with periodic tallying. The other important issues are intelligence based enforcement and antipoaching operations, extending the 24X7 e-surveillance in other sensitive areas, voluntary relocation of gujjars, prophylactic immunization of peripheral village livestock, time bound resettlement of Kalagarh colony, special monitoring of tuskers, securing habitat patches for hog deer, restorative inputs (on the lines of buffer management) for identified corridor connectivity, regulation of tourism as per the guidelines issued by the National Tiger Conservation Authority, ecodevelopment in buffer areas to enlist local public support, while reducing resource dependency, prompt payment of ex-gratia / compensation for depredation due to wild animals, safeguards on roads and areas having electrical transmission lines and coordination with the adjoining State of Uttar Pradesh and forest divisions within the State for keeping track of moving tigers.

Good Practices

M-STrIPES, Phase-IV monitoring and creation of camera trap photo ID database of tigers, 24X7 electronic surveillance in Kalagarh area and evolving innovative method for lantana eradication.