



NATIONAL TIGER CONSERVATION AUTHORITY / PROJECT TIGER

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

PARAMBIKULAM TIGER RESERVE

Parambikulam Tiger Reserve is nestled in the picturesque and extensive *AnamalaiNelliyampathy* landscape of the Western Ghats Mountains in Palakkad and Thrissur districts of Kerala. It is endowed with the bounty of nature in terms of remarkable habitat richness and species diversity. The habitat comprises predominantly of mixed deciduous, evergreen and semi-evergreen forests.

Area of the tiger reserve

Core/critical tiger habitat : 390.89 Km²

Buffer/peripheral area : 252.77 Km²

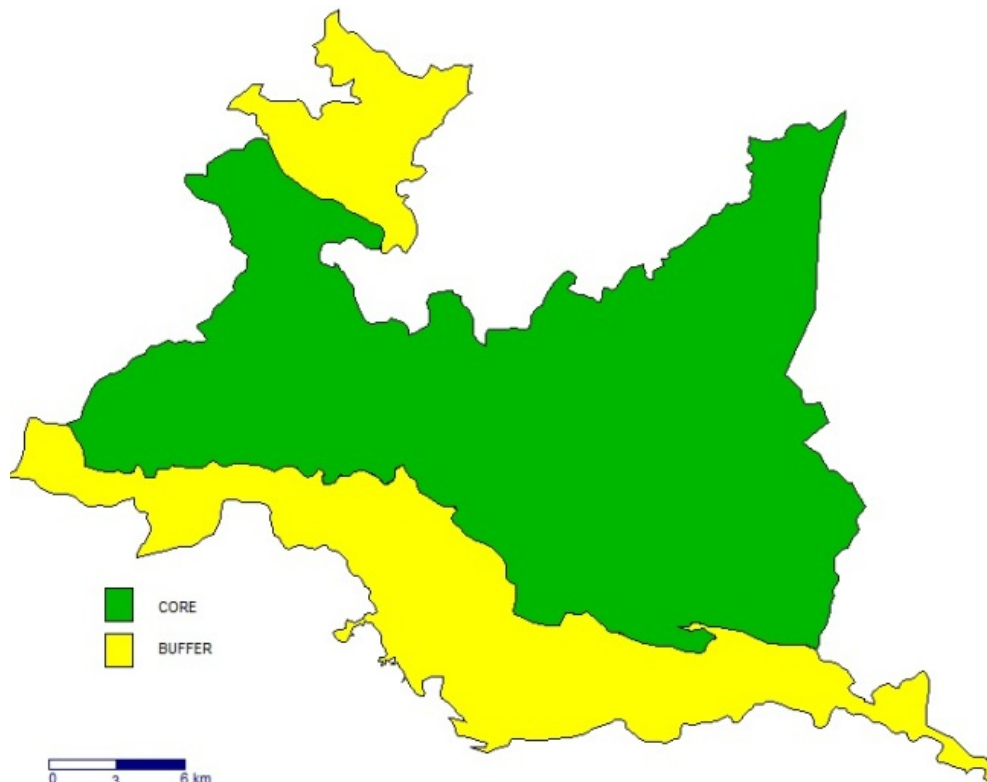
Total : 643.66 Km²

Location

Latitudes : 10° 20' N to 10° 26' N

Longitudes : 76° 35' E to 76° 50' E

Map



Habitat Attributes

The natural vegetation of Parambikulam is a combination of Malabar and Deccan elements. Micro-climatic fluctuations, coupled with edaphic, topographic and biotic factors have endowed the area with a rich floral diversity. The reserve supports diverse habitat types viz., evergreen, semi-evergreen, moist deciduous, dry deciduous and *shola* forests. Other unique habitats like montane and marshy grasslands, locally known as 'vayals', are also found. Teak plantations and deep freshwater ecosystems created by three dams further add to the diversity.

According to the revised classification of forest types of India by Champion and Seth (1968), the natural vegetation of is classified into seven categories:

- IA/C4 West coast tropical evergreen
- 2A/C2 West coast tropical semi-evergreen
- 38/C2 Southern moist mixed deciduous
- 38/C2 Southern dry mixed deciduous
- 2/E3 Moist bamboo brakes
- 8A/C1/E1 Reed brakes
- IIA/C1 Southern montane wet temperate forests (*sholas*)

Flora

The reserve has tremendous floral diversity with 1,835 species falling in 151 families, out of which 35 are monogeneric, while 517 genera are monospecific. The most dominant families are Fabaceae (117 spp.), Orchidaceae (110 spp.), Poaceae (109 spp.) and Euphorbiaceae (102 spp.). The dominant genera are *Ficus* (20 spp.), *Impatiens* (19 spp.), *Crotalaria* (16 spp.), *Litsea* (14 spp.) and *Diospyros* (14 spp.).

The number of endemic species recorded in the habitat indicates its biogeographic significance. There are 473 (26 percent) species of flowering plants, which are endemic to the Western Ghats, which include 162 trees, 89 shrubs, 165 herbs, 29 climbers, 18 lianas and 8 stragglers. The endemic genera are represented by *Anaphyllum*, *Blepharistemma*, *Decalepis*, *Haplothismia*, *Indobanalia*, *Indotristicha*, *Kanjarum*, *Moullava*, *Nilgirianthus*, *Ochreinauclea*, *Otonephelium*, *Poeciloneuron*, *Utleria* and *Willisia*.

There are 145 species of plants with a critical conservation status, viz. 40: endangered, 38 : vulnerable, 49 : rare and the remaining under other categories. Among the rare and endangered species, 85 are endemics. *Haplothismia*, thought to be extinct, has been rediscovered in the reserve. Similarly *Colubrina*, a climber recorded in the last century, has also been found. Some of the endangered species include: *Aglaia malabarica*, *Aporosa bourdillonii*, *Ardisia soncbifolia*, *Atuna travancorica*, *Cordia octandra*, *Derris benthamii*, *Desmos viridiflorus*, *Dysoxylum bedomei*, *Ovsoxvium malabaricum*, *Eugenia indica*, *Hopea erosa*, *Hopea ponga*, *Impatiens auricualta*, *Impatiens wightiana*, *Kingiodendron pinnatum*, *Palaquium ravli*, *Polypleurum filifolium*, *Psychotria globicephala* and *Tarenna monosperma*.

Fauna

The faunal diversity of the reserve is equally rich with several species: mammals (49), birds (336), reptiles (70), amphibians (34), freshwater fishes (81) and 1,049 insects belonging to 103 families. *Tomopterna parambikulamana* (Parambikulam Frog) and one species of sucker fish, *Garro surendranathanii*, are endemic to the reserve.

Tiger Status

As per the 2010 country level assessment of tiger, the landscape has a tiger population ranging from 17 to 20.

Core

The core/critical tiger habitat is, by and large, inviolate, devoid of human settlements. Day to day monitoring of tigers, coordination with adjoining Anamalai Tiger Reserve, protection and regulated tourism are important thrust areas.

Buffer

Providing ecologically sustainable livelihood options to local people, addressing human-wildlife interface, monitoring of wild animals and protection are important.

Corridor

The reserve has contiguity with other forest areas of the State and the adjoining State of Tamil Nadu. However, the linkages are weak and require recovery with a co-occurrence strategy, as adopted for the buffer. There is considerable habitat fragmentation between Sholayar and Malayattoor due to natural geographic features. The forest areas forming part of the corridor linkage in the Kerala side are as below:

Name of Division	PA(Km ²)	Non PA (Km ²)	Total (Km ²)
Eravikulam National Park	97.00	-	97.00
Chinnar Wildlife Sanctuary	90.442	-	90.442
Kurinjimala Wildlife Sanctuary	32.00	-	32.00
Anamudi Shola National Park	42.00	-	42.00
Pambadum Shola National Park	11.73	-	11.73
Chimmony Wildlife Sanctuary	85.00	-	85.00
Peechi Wildlife Sanctuary	125.484	-	125.484
Thattekkad Bird Sanctuary	25.14	-	25.14
Malayattoor Forest Division	-	617.7654	617.7654
Munnar Forest Division	-	618.2150	618.2150
Mankulam Forest Division	-	90.06	90.06
Marayur Forest Division	-	61.308	61.308
Chalakkudy Forest Division	-	226.0598	226.0598
Nemmara Forest Division	-	266.4674	266.4674

Vazhachal Forest Division	-	198.394	198.394
Total	508.80	2078.27	2587.07

Good Practices

Strengthened protection, Phase-IV monitoring, providing ecologically viable livelihood options to local people, innovative-ecofriendly tourism practices and addressing human-tiger interface issues.