

PERIYAR TIGER RESERVE

It was declared as a sanctuary during 1950 and declared as Tiger Reserve during 1978. The Periyar Tiger Reserve, named after the Periyar River, is one of our prestigious possessions on the High Ranges of Western Ghats, zealously guarded and efficiently managed.

Location and extent : It is located in the Ernakulam district and covers an area of 777 sq. km. Extending 76° 55' and 77° 25' to East Longitude and 9° 18 ' and 9°41' to North Latitude.

Topography : The overall elevation ranges from 100 meters at Pambavalley to 2019 meters at Kottamalai. Terrain is undulating with lofty peaks of over 1700 meters bordering the north and east. Towards the west it merges into an extensive tableland Mount Plateau of average elevation 1200 meters. From the edge of this plateau the land falls steeply to the thickly forested tracts of Sabarimala hills in the Pamba River basin.

Rainfall: The Annual rainfall ranges from 2000 mm to 3000 mm. Two-thirds of the rainfall occurs during the southwest monsoon from June to September. The northeast monsoon impacts from October to December. There are some pre-monsoon showers from mid April.

Drainage and rivers : The major rivers through the reserve are Mullayar and Periyar. Several streams feeding these two rivers and the Pamba and Azhuta River form the major source of water for the reserve.

Flora : Tropical evergreen and semi evergreen forests constitute 74.6% of the total area of Periyar Tiger Reserve, followed by moist deciduous forests that form 12.7% and grasslands which are 1.5% and eucalyptus come under 7.1% of the area. Periyar Lake constitutes the rest of the area i.e., 3.5%. The forest types include West coast Tropical evergreen forests, West coast tropical semi-evergreen forests, Southern moist mixed deciduous forests, Southern Hilltop Tropical evergreen forests, Southern montane wet temperate forests, South Indian sub tropical hill Savannas, Southern wet montane grasslands and eucalyptus plantations. The major tree species are *Vateria indica*, *Dipterocarpus indicus*, *Cullenia excelsa*, *Palaquium ellipticum*, *Artocarpus hirsute*, *Salmalia malabarica*, *Hopea parviflora*, *Tetrameles nudiflora*, *Terminaliasp*, *Tectona grandis*, *Pterocarpus marsupium*, *Anogeissus latifolia*, *Careya arborea*, *Embllica*

officinalis etc. The major grass species are *Cymbopogon* sp. *Saccharum* etc. Endemic Plants of Periyar Tiger Reserve are *Mucuna pruriens thekkadiensis*, *Habenaria periyarensis* & *Syzygium periyarensis*. The floristic richness of the reserve is unique with more than 50% of the entire flowering plants of Kerala, that includes 149 species listed under various threat categories. The degree of endemism and species richness is very high. Orchids found here constitute more than 65% for the entire Kerala. Out of the estimated 3800 species of flowering plants of Kerala the tiger reserve has 1966 species which is the highest record from a protected area of the state. Of the 1966 species of flowering plants reported from Periyar Tiger Reserve, 515 (26%) are Southern Western Ghat endemics. Periyar is rich in medicinal plants. More than 350 species have been recognised as medicinally important. The common medicinal species are Glory Lily, (*Gloriosa superba*), Kino Tree (*Pterocarpus marsupium*), *Gymnema sylvestre*, *Hemidesmus indicus* etc. *Begonia albo-coccinea* is categorised as vulnerable.

Fauna : In Periyar Tiger Reserve there is a rich diversity of vertebrates. The diverse forest types, vayals, marshes, and a large aquatic habitat together support 62 species of mammals, 320 species of birds, 45 species of reptiles, 27 species of amphibians, and 38 species of fishes. The invertebrate fauna of Periyar is not well documented, though the predominant invertebrate orders are Protozoa, Annelida, Arthropoda and Mollusca. 160 butterfly species have been listed. Of these, 19 are Western Ghat endemics. The evergreen forests contain several endemic and rare species. The butterfly diversity was found more in moist deciduous forests including teak and also eucalyptus plantations. This sanctuary is mainly home for Elephants, Gaur, Tiger, Panther, Sambar, Barking Deer, Wild Boar, Sloth Bear, Nilgiri langur, Lion tailed macaque, Otter, Malabar giant squirrel, Wild dog etc are the major mammals. Salim Ali's fruit bat reported from Periyar adjoining the High Ways is an endemic and endangered species, considered to be among the rarest of bats. Nilgiri marten is an extremely rare and endemic mustellid, though recently sighted a number of times.