

BIODIVERSITY OF WEST BENGAL

The wide variety in physical feature and climate situations have resulted in a diversity of ecological habitats in West Bengal, like coastal and marine ecosystem, mangroves ecosystem, wetland ecosystem, grassland ecosystem, tropical or evergreen forest and alpine forest ecosystem.

Coastal and Marine Ecosystem

The Marine ecosystem in India Covers 2.1 million Sq.km. areas. The available data on faunal diversity reveals that it represents more than 15% of total fauna of the country. Such ecosystem in the state is located in Sunderbans in S. 24 Pgs district under Tiger Reserve and Biosphere Reserve areas covering coastline of 650 Kms in the northern part of Bay of Bengal.

Mangrove

Mangrove forest ecosystem is a typical salt evergreen forest found mainly at Sunderbans covering an area of about 4200 Sq km. The main characteristic feature of mangrove vegetation is the presence of aerial breathing root and oviparous germination. The predominant mangrove species are *Avisennia officinalis*, *Excoecana agallocha*, *Heritiera tomes*, *Brugutera parviflora*, *Cenops decandia*, *Rhtzophora mucronata* and *Zylocarpus granatum*. Sunderbans mangrove forest is well known for man eating tigers hunting on land and large size dangerous estuarine crocodiles in water also harbour a number of mollusks, polychaetes and honeybees.

Wetlands

These ecosystems encompass diverse and heterogeneous habitats ranging from rivers, fold plains and rain lakes to swamps, estuaries and salt marshes. India has about 4.1 million ha. of wetlands(excluding paddy fields and mangroves) of which 1.5 million ha, are natural and 2.6 million ha are man-made.

The predominant wetland types of the State are marshes, jheels, terai, swamps and char lands of the Gangetic plains, wetlands in Island of Bay of Bengal and coastal brackish water. These wetlands harbour enormous diversity of floral and fauna species many of which are endangered.

Grasslands

In West Bengal Jaldapara Wildlife Sanctuary has pure grassland extends over 30.55 Sq. km. which is the important habitat of Rhino, Hog Deer, Spotted Deer, Barking Deer, Elephant and Gaur.

In Buxa Tiger Reserve, riverine grasslands and savannah woodlands occupy a considerable part of 51.31 Sq.km. which offers grazing ground for Cheetal, Sambar, Barking Deer, Hog Deer, Gaur and Elephant. The riverine grassland and Savannah woodland occupy about 20% of the total plant cover of Gorumara National Park, which is the grazing ground of wild herbivores. In Sunderbans Tiger Reserve, the sea facing areas have a long line of Saccharum grassland ideally suited for tiger and its prey species.

Tropical or Evergreen Forest

Tropical forest rises roughly to an altitude of about 1200 m, contains deep sided valleys and gorges with well drained flanking slope clothed in dense evergreen jungles. It is characterized by gigantic trees, climbers draping their tops. These tropical forest harbour enormous diversity of floral and fauna species many of which are endangered.

Alpine Forest Ecosystem (Mountain)

Alpine zone stretches between 3650 and 5500m altitude- the limit of tree growth. The vegetation is restricted here fir, pine, rhododendron, juniper and cotoneasters scrub. Plant life in this zone is dependant entirely on snowfall and melting snow, and gets progressively dwarfed and scanty towards the upper limits. In this habitat snow leopard, bear and a large number of beautiful colored birds and butterflies can be seen.