

I. Introduction:

Gulmarg Wildlife Sanctuary:

Gulmarg Wildlife Sanctuary falls 26 Kms to the South-West of District Baramulla of Jammu & Kashmir. Nearest Airport lies at 95 Km's and Railhead stands 24 Kms away.

Location:-

Altitude: 2400-4300 MSL.

Longitude 74°.17' to 74°.79' N ,

Latitude 34°.55' to 34°.60' E

Area:-

Area of Gulmarg Wildlife Sanctuary of 180 Sq. Kms.

Rationale:

Gulmarg Wildlife Sanctuary abodes rich faunal and floral bio-diversity with variegated species like Musk Deer, Common Leopard, Barking Deer, Asiatic Black Bear, Himalayan Black Bear, Indian Wolf, Snow Cock, Chakoor etc. Since the area is connected with the lower planes of Indian sub-continent, sometimes presence of certain Wildlife species are also visible in the sanctuary who usually migrate from the lower planes e.g Barking Deer. Large number of Musk Deer's are seen in the gushing nalla of Ferozpora in areas of Afferwat, Botapathri, Babareshi, Gulmarg bowl etc. To ensure survival of highly endangered Musk Deer (*Moschus crysogater*), Gulmarg Wildlife Sanctuary was upgraded from Man and Bio-sphere Reserve in the year 1987. The area is one of the best world renowned tourist destination for its famous meadows, rocky cliffs, dense birch forests and a home for bird watcher.

Boundary:-

The area is surrounded in North by Jehlum valley Forest Division-Baramulla, South by Forest Division of Poonch and Pir-Panchal. East is flanked by village of Drang and Badrakoot forests of Special forest Division-Tangmarg and on the West by Special Forest Division Tangmarg and Baba Reshi, village

II. Legal Status:

Gulmarg Wildlife Sanctuary : Notified vide S.R.O.147, Dated:- 14-03-1987

III. Biodiversity:

FLORA:

The Gulmarg Wildlife Sanctuary shows varied vegetation types determined according to the habitat from any density of dominant floral species. The vegetation communities are under the influence and control of various physical and biological factors like altitude, aspect, habitat conditions and above all biotic interference. The spurs and grooves exhibit purely natural vegetation and are dominated by coniferous crop, ranging between 85% to 90% of the total wood cover. Flowing major forest types have been distinguished in the area.

1. Blue pine:

Kail (*Pinus griffithii*) is the dominant constituent of this community, which at places get intermixed with the stands of spruce (*Picea smithiana*), yew (*Taxus wallichiana*), maple (*Acer cappadocicum*) and horse chestnut (*Aesculus indica*). The understorey of indigofera heterantha, rose webbiana and viburnum cappadocicum is poor. It occurs in small patches at lower altitudes on dry aspect of the slopes.

2. Silver Fir Forest:

The fir (*Abies pindrow*) crop is restricted on mountain grooves and moist aspects at heights. At lower limits it is associated at some places with Kail (*Pinus griffithii*), yew (*Taxus wallichiana*), spruce (*Picea smithiana*), horse chestnut (*Aesculus indica*) etc. together with an undergrowth of viburnum grandiflorum, Skimmia lawreola, when at heights juniperus communis patches, Betula utilis stands and coniferous regeneration come into isolation.

3. Birch:

This assemblage is characterized by a good stratification of birch (*Betula utilis*) extending between 3,000 to 3,500 M and is distributed in the mountain grooves and shady places. The fir (*Abies pindrow*)

4. Sub Alpine Forest:

Main associates of this forest type are fir (*Abies pindrow*), kail (*Pinus griffithii*), spruce (*Picea smithiana*), yew (*Taxus wallichiana*) and birch (*Betula utilis*). It has been further divided into following communities:

5. Alpine Pastures

The vast pastures above tree line luxuriantly support herbaceous ground layer of *inula-grandiflora*, *primula*

elliptica, potentilla gelida, corydalis, cornuta, gentian venusta, Anemone obtusiloba, Aquilegia nivales, ploygonum affine, P. alpinum, Rumex acetosa.

Fauna

S.No	Species	Zoological Name
1.	Kashmir Musk Deer	<i>Moschus crysogater</i>
2.	Asiatic Black Bear	<i>Ursus thibetanus</i>
3.	Himalayan Brown Bear	<i>Ursus arctos</i>
4.	Common Leopard	<i>Panthera pardus millardi</i>
5.	Grey Langur	<i>Presbytis entellus</i>
6.	Rhesus Macaque	<i>Macaca mulatta</i>
7.	Red Fox	<i>Vulpes vulpes</i>
8.	Jungle Cat	<i>Felis chaus</i>
9.	Leopard Cat	<i>Felis bengalensis</i>
10.	Brown Musk Shrew	<i>Crocidura murina</i>
11.	Small Indian Mongoose	<i>Herpestes auropunctatus</i>
12.	Yellow Throated Martin	<i>Martes flavigula</i>
13.	Kashmir Vampire	<i>Mergaderma spectrum</i>
14.	Kashmir House rat	<i>Rattus rattus</i>
15.	Short-Tailed Bandicoot Rat	<i>Nesolia indica</i>
16.	Birch Mouse	<i>Sicista indica</i>
17.	Small Kashmir Flying Squirrel	<i>Eoglaucomys fimbriatus</i>
18.	Tibetan Wolf	<i>Canis leupus</i>

Avi-Fauna:

S. NO.	Name of the Species	Zoological Name.
1.	Grey Heron	<i>Ardea cinera</i>
2.	Pond Heron or Paddy Bird	<i>Ardeota grayil</i>
3.	Night Heron	<i>Nycticorax nycticorax</i>
4.	Blackeared Kite	<i>Milvus migrans linetus.</i>
5.	Eurasian Sparrow Hawk	<i>Accipiter nisus melaschistos</i>
6.	Golden Eagle	<i>Aquila chrysaetos</i>
7.	Himalayan Griffon	<i>Gypsy Himalayensis</i>
8.	Bearded Vulture or	<i>Gypaetus barbatus</i>

	Lammergeier	
9.	Marsh Harrier	<i>Gypaetus barbatus</i>
10.	Hobby	<i>Falco subbuteo</i>
11.	Kestrel	<i>Falco tinnunculus</i>
12.	Himalayan snow cock	<i>Tetraogallus himalayensis</i>
13.	Chukar Partridge	<i>Alcetoris chukar</i>
14.	Monal Pheasant	<i>Lophophorus impejanus</i>
15.	Koklas Pheasant	<i>Catreus wallichii</i>
16.	Common Sandpiper	<i>Tringa hypoleucos</i>
17.	Whiskered Tern	<i>Chidonias hybrida</i>
18.	Snow Pigeon	<i>Columba leuconota</i>
19.	Rock Pigeon	<i>Columba livia</i>
20.	Rufous turtle Dove	<i>Strptopelia orientalis</i>
21.	Indian Ring Dove	<i>Strptopelia decaocto</i>
22.	Slatyheaded Prakeet	<i>Psittacula himalayana</i>
23.	Eurasian Cuckoo	<i>Cuculus canorus</i>
24.	Small Cuckoo	<i>Cauculus poliocephalus</i>
25.	Himalayan Pied Kingfisher	<i>Ceryle lugubris</i>
26.	Lesser Pied Kingfisher	<i>Ceryle rudis</i>
27.	Common Kingfisher	<i>Ceryle rudis</i>
28.	White Breasted Kingfisher	<i>Halcyon symrnensis</i>
29.	European Bee-Eater	<i>Meropsapi aster</i>
30.	European Roller	<i>Coracias garrulous</i>
31.	Hoopoe	<i>Upupa epops</i>
32.	Blackthroated Jay	<i>Garrulus lanceolatus</i>
33.	Yellowbilled Blue Magpie	<i>Cissa flavirostris</i>
34.	Spotted Nutcracker	<i>Nucifraga Caryocatactes</i>
35.	Yellowbilled or Alpine Chough	<i>Pyrrhocorax graculus</i>
36.	Redbilled Cough	<i>Pyrrhocorax pyrrhocorax</i>
37.	Eurasian Jackdaw	<i>Corvus monedula</i>
38.	Large-billed crow	<i>Corves macrohynchos</i>
39.	Long tailed Minivet	<i>Pericrocotus ethologus</i>
40.	Himalayan Bulbul	<i>Pycnonotus leucogenys</i>

41.	Black Bulbul	<i>Hypsipetes madagascariensis</i>
42.	Variiegated Laughing Thursh	<i>Garrulax Variiegatus</i>
43.	Streaked Laughing Thrush	<i>Garrulaz lineatus</i>
44.	Sooty Flycatcher	<i>Muscicapa sibirica</i>
45.	Rufoustailed Flycatcher	<i>Muscicapa ruficauda</i>
46.	Kashmir Flycatcher	<i>Muscicapa Superciliari</i>
47.	Little Pied Flaycatcher	<i>Muscicapa leucomelanura</i>
48.	White browed Blue Flycatcher	<i>Muscicapa superciliaris</i>
49.	Stay Blue Flycatcher	<i>Muscicapa superciliaris</i>
50.	Grayheaded Flycatcher	<i>Culicicapa celonensis</i>
51.	Paradise Flycatcher	<i>Terpsiphone paradise</i>
52.	Brown flanked Bush warbler	<i>Cetti Montana</i>
53.	Clamarous reed warbler	<i>Acrocephalus stentoreus</i>
54.	Lesser Whitethroat	<i>Syliva curruca</i>
55.	Plain Leaf Warbler	<i>Phylloscopus neglectus</i>
56.	Tytler's Leaf Warbler	<i>Phylloscopus tytleri</i>
57.	Tickell's Leaf warbler	<i>Phylloscopus affinis</i>
58.	Yellow-bowed Leaf Warbler	<i>Phylloscopus inornatus</i>
59.	Grey headed Flycatcher-Warbler	<i>Seicerus xeinthoschistos</i>
60.	Gold crest	<i>Regulus regulus</i>
61.	Himalayan Ruby throat	<i>Erithacus pectoralis</i>
62.	Orange flanked Bush Robin	<i>Erithacus cyanurus</i>
63.	Black redstart	<i>Phoenicurus ophoenicuroides</i>
64.	Guldenstadt's Redstart	<i>Phoenicurus erthrogaster</i>
65.	Plumbeous Redstart	<i>Rhyacornis fuliginosus</i>
66.	Little Forktail	<i>Enicurus scouleri</i>
67.	Spotted Fork tail	<i>Enicurus maculates</i>
68.	White capped Redstart of River Chat	<i>Chaimarrornis leucocephalus</i>

69.	Blue Whistling Thrush	<i>Mylophonus caeruleus</i>
70.	Tickell's Thrush	<i>Turdus unicolor</i>
71.	Mistle Thrush	<i>Turdus viscivorus</i>
72.	White breasted Dipper	<i>Cinclus cinclus</i>
73.	Brown Dipper	<i>Cinclus pallasi</i>
74.	Great Tit	<i>Parus major</i>
75.	Green blacked Tit	<i>Parus monticolus</i>
76.	Crested BlackTit	<i>Parus Melanlophus</i>
77.	Firecapped Tit	<i>Cephalopyrusflamm-flammniceps</i>
78.	Kashmir Nuthatch	<i>Sitta europea cashmirensis</i>
79.	Himalayan Tree Creeper	<i>Certhia Himalayan</i>
80.	Brown Rock Pipt	<i>Anthus similes</i>
81.	Yelow Wagtail	<i>Motacilla flava</i>
82.	Citrine Wagtail	<i>Motacilla citreola</i>
83.	Grey Wagtail	<i>Motacilla cinerea</i>
84.	White Wagtail	<i>Motacilla alba</i>
85.	Oriental White-Eye	<i>Zosterops palpebrosa</i>
86.	House Sparrow	<i>Passer domesticus</i>
87.	Tree Sparrow	<i>Passer montanus</i>
88.	Cinnamon Tree Sparrow	<i>Passer rutilans</i>
89.	Black and Yellow Grosbeak	<i>Coccothraustes icteriodas</i>
90.	European Goldfinch	<i>Coccothraustes icteriodas</i>
91.	Himalayan Greenfinch	<i>Cardaelis spinoides</i>
92.	Common Rosefinch	<i>Carpodacus erythrinus</i>
93.	Orange Bullfinch	<i>Carpodacus erythrinus</i>
94.	Rock Bunting	<i>Emberiza cia</i>
	<u>BUTTERFLIES</u>	
1.	Regal Apollo	<i>Parnassius charltonius</i>
2.	Common Blue Apollo	<i>Parnassius hardvriquet</i>
3.	Common Red Apollo	<i>Parnassius epaphus</i>
4.	Brown Argus	<i>Dallacha hyagriva</i>
5.	Mountain Argus	<i>Callerebia shallada</i>
6.	Meadow Brown	<i>Maniola pulchra</i>
7.	Narrowbanded Satyr	<i>Aulocera brhamnius</i>

8.	Large Tortoise shell	<i>Nymphalis xanthomelas</i>
9.	Blackleg Tortoise shell	<i>Nymphalis polychloroas</i>
10.	Mountain Tortoise shell	<i>Aglais urticae</i>
11.	Indian Tortoise shell	<i>Aglais cashmirensis</i>
12.	Chocolate pansy	<i>Precis iphita</i>
13.	Lemon Pancy	<i>Precis lemoniass</i>
14.	Orange Oakleaf	<i>Kallima inachus</i>
15.	Common Beak	<i>Libythea lepita</i>
16.	Lesser Punch	<i>Dodona dipoea</i>
17.	Tailed Punch	<i>Dodona eugenes</i>

Gulmarg Wildlife Sanctuary Area: Administrative Control

The total area of the Gulmarg Wildlife Sanctuary is 180 Kms which involves the top catchment of Ferozpur Nallah and forests surrounding the Gulmarg Bowl. The Gulmarg Wildlife Sanctuary has two administrative units Ferozpora /Tangmarg and Block Gulmarg. The compartment No. 54 to 58 are treated as Upper elevations of the sanctuary whereas Compartment No. 31 to 41 are treated as Lower/Gulmarg Bowl.

The upper elevations of Compartment No. 50-58 i.e 50-53 of Drang Nalla and 54-58 of Ferozpora Nalla have been handed over to the Department of Wildlife Protection Jammu & Kashmir during the year 1984 and Compt. No.41 during the year 2003, whereas rest of the Compartments. From 31-40 (Ten Compartments) of Wildlife Sanctuary Gulmarg are still under the administrative control of Territorial Forest Division, Tangmarg .

The Map showing the administrative control by the two different departments over the Gulmarg Wildlife Sanctuary area is appended at Annexure- (). About 120 Sq.Km area consisting of Alpine and middle area managed by the Department of Wildlife Protection and

about 60 Sq.Km bowl and lower area which is administrated by the Jammu & Kashmir Forest Department .

The area which is being managed by the Department of Wildlife Protection does not have any boundary dispute and there is no encroachment in that portion of the Wildlife Sanctuary area. Whereas, the Wildlife Sanctuary area falling in the bowl has boundary disputes between various stake holder organizations operating in Gulmarg area. As per the latest Court directions the delineation of the actual boundary of the Sanctuary has been started in association with Gulmarg Development Authority, Revenue and Territorial organization.

Gulmarg Gandola :-

The construction of Gulmarg Gandola Phase 1st was started in 1988 and was commissioned during the year 1998 and the 2nd phase of Gulmarg Gandola was started in the year 2003 and commissioned during the year 2005 .The total length of the phase 1st and 2nd Gulmarg Gandola is 6000 Mtrs from base to Kongdoori and from Kongdoori to Affarwat. The number of towers supporting Cable car are 37 out of which 18 towers falls in Compartment No.38 and 19 towers in Compartment No.50 .The entire Gondola route is falling within the confines of Gulmarg Wildlife Sanctuary .

Tourism related activities in Gulmarg:-

All the tourism related activities carried out by different organizations like Gulmarg Development Authority, Gulmarg Cable Car Corporation, J&K Tourism Development Corporation, Department of Tourism within the Gulmarg bowl contravene the Wildlife Protection Act 1978 amended up to 2002.

In addition to these activities various Army installations are also existing within the confines of the Gulmarg Wildlife Sanctuary.