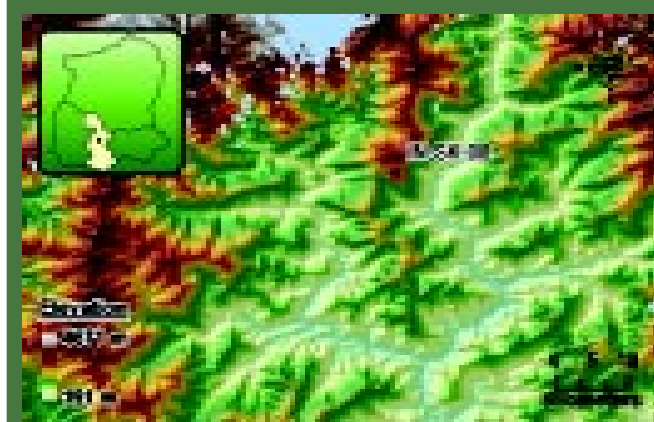


MAENAM WILDLIFE SANCTUARY –TENDONG RF



IBA Site Code	: IN-SK-08
State	: Sikkim
District	: South Sikkim
Coordinates	: 27° 18' 50" N, 88° 23' 35" E
Ownership	: State Forest Department
Area	: 3,539 ha
Altitude	: 2,100 - 3,300 m
Rainfall	: Not available
Temperature	: Not available
Biogeographic Zone	: Himalaya
Habitats	: Subtropical Dry Evergreen Forest, Subtropical Broadleaf Hill Forest

IBA CRITERIA: A1 (Threatened Species), A2 (Endemic Bird Area-130: Eastern Himalayas); A3 (Biome-7: Sino-Himalayan Temperate Forest, Biome-8: Sino-Himalayan Subtropical Forest)
 PROTECTION STATUS: Wildlife Sanctuary, established in 1987 and Tendong Reserve Forest, not officially protected

GENERAL DESCRIPTION

Maenam Wildlife Sanctuary is located on the Maenam-Tendong ridge which runs north-south bisecting Sikkim longitudinally and is drained by the Tista river to the East and Rangit river in the West. The altitudinal gradient of 2,100 m - 3,300 m provides for a range of microclimates and floral diversity from subtropical forests to stabilized scree slopes. These diverse forest types in turn shelter a wide range of faunal elements. The Sanctuary has tremendous watershed value, being the only source of perennial water on this ridge. The South District headquarters, Namchi, situated 30 km due south totally depends on the water piped from the Burmelly stream originating from within the Sanctuary precincts. The adjoining town of Ravangla also depends on the Sanctuary for potable water.

“Maenam-la” translates to the “Treasury of Medicines”, being a rich trove of medicinal plants. There is also a historical Buddhist monastery, the Maenam Gompa, at the top of the ridge. Interestingly, despite the disturbance from nearby urban areas, Maenam harbours a rich bird diversity (Anon. 2001).

The entire stretch of forest along Temi-Tarku-Damthang-Tendong-Bhanjyang- Ravangla-Maenam and further north linking with Karjee-Labdang forests of the Khangchendzonga Biosphere Reserve is virtually contiguous, planted in a few places with the exotic *Cryptomeria japonica* trees. Tea plantations of the State Government occupy a part of Temi.

AVIFAUNA

There are several villages fringing this IBA due to which the habitat is open in several places. This open habitat coupled with patches of dense forest provides ideal bird habitats in the IBA. The Hodgson's Frogmouth *Batrachostomus hodgsoni* was observed in Pabong area (Ganguli-Lachungpa and Lucksom 1998).

The site lies in the Eastern Himalayas Endemic Bird Area (EBA-130), in which Stattersfield et al. (1998) have listed 21 restricted range species. Eight of these have been seen here (U. Lachungpa pers. comm. 2003).

This mid-altitude IBA falls mainly in Sino-Himalayan Temperate Forest (Biome-7). BirdLife International (undated) has listed 112 species in this biome, of which 53 are found here. The higher reaches of this IBA, above 3,000 m show some birds of Biome-5 (Eurasian High Montane - Alpine and Tibetan) where 48 species are listed and seven are seen in this site. At lower reaches, Biome-7 merges with Biome-8 (Sino-Himalayan Subtropical Forest) where 95 species are listed. Almost half of them (42 species) have been found here. Some areas of this IBA, especially in the valleys also show some faunal elements of Biome-9 (Indo-Chinese Tropical Moist Forest). Four species of this biome are also found here. They are Grey Peacock Pheasant *Polyplectron bicalcaratum* (unconfirmed), Pale-headed Woodpecker *Gecinulus grantia*, Greater Necklaced Laughingthrush *Garrulax pectoralis* and Sultan Tit *Melanochlora sultanea*. The list of other biome species is too long to be mentioned here.

This IBA has habitat contiguity with the Khangchendzonga Biosphere Reserve (U. Lachungpa pers. comm. 2003), therefore, both these IBAs together form a large habitat for the bird life of this small state. The site fulfils three IBA criteria: A1 (Threatened Species), A2 (EBA-130: Eastern Himalayas) and A3 (Biome-restricted species).

Vulnerable	
Greater Spotted Eagle	<i>Aquila clanga</i>
Red-breasted Hill-Partridge	<i>Arborophila mandellii</i>
Blyth's Tragopan	<i>Tragopan blythii</i>
Rufous-necked Hornbill	<i>Aceros nipalensis</i>
Rusty-bellied Shortwing	<i>Brachypteryx hyperythra</i>
Endemic Bird Area-130: Eastern Himalayas	
Rufous-throated Wren-Babbler	<i>Spelaornis caudatus</i>
Wedge-billed Wren-Babbler	<i>Sphenocichla humei</i>
Hoary-throated Barwing	<i>Actinodura nipalensis</i>
White-naped Yuhina	<i>Yuhina bakeri</i>
Broad-billed Flycatcher-Warbler	<i>Tickellia hodgsoni</i>

Biome-7: Si no-Himalayan Temperate Forest

Common Hill-Partridge	<i>Arborophila torqueola</i>
Satyr Tragopan	<i>Tragopan satyra</i>
Speckled Wood-Pigeon	<i>Columba hodgsonii</i>
Darjeeling Pied Woodpecker	<i>Dendrocopos darjellensis</i>
Nepal House-Martin	<i>Delichon nipalensis</i>
Rufous-breasted Accentor	<i>Prunella strophia</i>
Maroon-backed Accentor	<i>Prunella immaculata</i>
Long-tailed Thrush	<i>Zoothera dixonii</i>
White-collared Blackbird	<i>Turdus albocinctus</i>
Chestnut Thrush	<i>Turdus rubrocanus</i>
Gould's Shortwing	<i>Brachypteryx stellata</i>
Indian Blue Robin	<i>Luscinia brunnea</i>
Golden Bush-Robin	<i>Tarsiger chrysaeus</i>
White-throated Laughingthrush	<i>Garrulax albogularis</i>
Striated Laughingthrush	<i>Garrulax striatus</i>
Scaly Laughingthrush	<i>Garrulax subunicolor</i>
Black-faced Laughingthrush	<i>Garrulax affinis</i>
Slender-billed Scimitar-Babbler	<i>Xiphirhynchus supercilii</i>
Greater Scaly-breasted Wren-Babbler	<i>Pnoepyga albiventer</i>
Spotted Wren-Babbler	<i>Spelaeornis formosus</i>
Bar-throated Minla	<i>Minla strigula</i>
Red-tailed Minla	<i>Minla ignotincta</i>
Gold-breasted Tit-Babbler	<i>Alcippe chrysotis</i>
White-browed Tit-Babbler	<i>Alcippe vinipectus</i>
Rufous Sibia	<i>Heterophasia capistrata</i>
Stripe-throated Yuhina	<i>Yuhina gularis</i>
Rufous-vented Yuhina	<i>Yuhina occipitalis</i>
Myzornis	<i>Myzornis pyrrhoura</i>
Chestnut-headed Tesia	<i>Tesia castaneocoronata</i>
Grey-bellied Tesia	<i>Tesia cyaniventer</i>
Grey-sided Bush-Warbler	<i>Cettia brunnifrons</i>
Grey-faced Leaf-Warbler	<i>Phylloscopus maculipennis</i>
Large-billed Leaf-Warbler	<i>Phylloscopus magnirostris</i>
Orange-gorgeted Flycatcher	<i>Ficedula strophia</i>
Slaty-backed Flycatcher	<i>Ficedula hodgsonii</i>
Ultramarine Flycatcher	<i>Ficedula supercilii</i>
Slaty-blue Flycatcher	<i>Ficedula tricolor</i>
Sapphire Flycatcher	<i>Ficedula sapphira</i>
Rufous-bellied Niltava	<i>Niltava sundara</i>
Rufous-fronted Tit	<i>Aegithalos iouschistos</i>
Brown Crested Tit	<i>Parus dichrous</i>
Green-backed Tit	<i>Parus monticolus</i>
Yellow-browed Tit	<i>Sylviparus modestus</i>
White-tailed Nuthatch	<i>Sitta himalayensis</i>
Fire-tailed Sunbird	<i>Aethopyga ignicauda</i>
Tibetan Siskin	<i>Serinus thibetanus</i>
Blanford's Rosefinch	<i>Carpodacus rubescens</i>
Dark-breasted Rosefinch	<i>Carpodacus nipalensis</i>
Pink-browed Rosefinch	<i>Carpodacus rodochrous</i>
Scarlet Finch	<i>Haematospiza sipahi</i>
Red-headed Bullfinch	<i>Pyrrhula erythrocephala</i>
Gold-naped Black Finch	<i>Pyrrhoptectes epauletta</i>
Yellow-billed Blue Magpie	<i>Urocissa flavirostris</i>

Biome-8: Si no-Himalayan Subtropical Forest

Rufous-throated Hill-Partridge	<i>Arborophila rufogularis</i>
Slaty-headed Parakeet	<i>Psittacula himalayana</i>
Blue-throated Barbet	<i>Megalaima asiatica</i>
Bay Woodpecker	<i>Blythipicus pyrrhotis</i>
Blue-naped Pitta	<i>Pitta nipalensis</i>
Black-winged Cuckoo-Shrike	<i>Coracina melaschistos</i>
Short-billed Minivet	<i>Pericrocotus brevirostris</i>
Striated Bulbul	<i>Pycnonotus striatus</i>
Himalayan Bulbul	<i>Pycnonotus leucogenys</i>
White-throated Bulbul	<i>Alophoixus flaveolus</i>
Rufous-bellied Bulbul	<i>Hypsipetes mcclllandii</i>
Black Bulbul	<i>Hypsipetes leucocephalus</i>
Orange-bellied Chloropsis	<i>Chloropsis hardwickii</i>
Blue-headed Rock-Thrush	<i>Monticola cinclorhynchus</i>
Tickell's Thrush	<i>Turdus unicolor</i>
Grey-winged Blackbird	<i>Turdus boulboul</i>
White-tailed Robin	<i>Miomela leucurum</i>
Blue-fronted Robin	<i>Cinclidium frontale</i>
Slaty-backed Forktail	<i>Enicurus schistaceus</i>
Purple Cochoa	<i>Cochoa purpurea</i>
Green Cochoa	<i>Cochoa viridis</i>
Blue-winged Laughingthrush	<i>Garrulax squamatus</i>
Red-faced Liocichla	<i>Liocichla phoenicea</i>
Rusty-cheeked Scimitar-Babbler	<i>Pomatorhinus erythrognys</i>
Rufous-capped Babbler	<i>Stachyris ruficeps</i>
Red-billed Leiothrix	<i>Leiothrix lutea</i>
Cutia	<i>Cutia nipalensis</i>
Rufous-bellied Shrike-Babbler	<i>Pteruthius rufiventer</i>
Rusty-fronted Barwing	<i>Actinodura egertoni</i>
Blue-winged Minla	<i>Minla cyanouroptera</i>
Striated Yuhina	<i>Yuhina castaniceps</i>
Black-chinned Yuhina	<i>Yuhina nigrimenta</i>
Lesser Rufous-headed Parrotbill	<i>Paradoxornis atrosuperciliaris</i>
Slaty-bellied Tesia	<i>Tesia olivea</i>
Grey-headed Flycatcher-Warbler	<i>Seicercus xanthoschistos</i>
White-gorgeted Flycatcher	<i>Ficedula monileger</i>
Small Niltava	<i>Niltava macgrigoriae</i>
Red-headed Tit	<i>Aegithalos concinnus</i>
Black-throated Sunbird	<i>Aethopyga saturata</i>
Streaked Spiderhunter	<i>Arachnothera magna</i>
Maroon Oriole	<i>Oriolus trailii</i>
Grey Treepie	<i>Dendrocitta formosae</i>

OTHER KEY FAUNA

Fauna includes Red Panda *Ailurus fulgens*, Leopard *Panthera pardus*, Asiatic Black Bear *Ursus thibetanus*, Serow *Nemorhaedus sumatraensis*, Goral *Nemorhaedus goral*, Barking Deer *Muntiacus muntjak*, Mouse Hare *Ochotona roylei*, Particoloured Flying Squirrel *Hylopetes alboniger*, Hoary-bellied Himalayan Squirrel *Callosciurus pygerythrus*, Orange-bellied Himalayan Squirrel *Dremomys lokriah*, Yellow-throated Marten *Martes flavigula*, Assamese Macaque *Macaca assamensis* and Himalayan Crestless Porcupine *Hystrix brachyura*.

LAND USE

- q Nature conservation and research
- q Tourism and recreation
- q Watershed management

THREATS AND CONSERVATION ISSUES

- q Disturbance to birds
- q Recreation and tourism
- q Erosion
- q Illegal felling of trees
- q Poaching

A collaborative biodiversity survey was carried out by World Pheasant Association (WPA)-India and the State Forest Department in 1996 (Ahmed and Ganguli-Lachungpa 1996), prior to which Dipankar Ghosh carried out a short study on Satyr Tragopan through WPA (U. Lachungpa pers. comm. 2003). The Sanctuary and surrounding villages were also covered during the National Biodiversity Strategy and Action Plan (NBSAP: a project of the Ministry of Environment and Forests/Kalpavriksh) exercise carried out by the State Forest Department. In addition, formation of Eco-development Committees and 'Pani' (Water) Panchayats in villages around Maenam WLS was also facilitated by the State Forest Department (Sandeep Tambe pers. comm. 2003). In 2002, the State Government declared a State Biodiversity Park at Damthang, Tendong comprising 250 ha (S. B. S. Bhadauria pers. comm. 2003).

Erosion, landslides and landslips, snow, weeds, wind, poaching, destruction of habitat due to illegal felling and collection of non-timber forest fruits (food of the Asiatic Black Bear, Barking Deer and monkeys) and encroachment in the form of cardamom cultivations are some of the issues affecting the Sanctuary (Anon. 2001).

Domestic cattle compete with wild herbivores for fodder and water, and spread disease, while the attendant migratory graziers within the sanctuary cause immense damage to the habitat. Twenty-five permanent cattle-sheds from within the Sanctuary were removed in a phased manner between 2000 and 2002. These cattle-sheds,

with their domestic dogs, their incessant demand for firewood, lopping of trees for fodder, and cutting of poles for construction, used to cause grave damage to the biodiversity of this Sanctuary. The land formerly occupied by these cattle-sheds gradually changed into man-made meadows. Other than grass, unpalatable weeds such as *Rumex nepalensis* have also sprung up. Grazing by stray cattle belonging to the adjoining villages is still a major problem (Anon. 2001).

Uncontrolled tourism causes damage to vegetation and change in the behavioral pattern of wild animals in general. Recreational tourism within the Sanctuary is picking up and the magnificent mountain views are a great attraction for tourists. Religious pilgrimages to Bhale-Dhunga and the Buddhist monastery are quite popular amongst the local community. Problems of garbage and noise pollution, vandalism and other tourism generated pressures need to be addressed.

KEY CONTRIBUTORS

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