

LOWLAND FORESTS OF SOUTH SIKKIM (MELLI - BAGUWA - KI TAM, JORETHANG - NAMCHI, SOMBAREY)



IBA Site Code	:	IN-SK-07
State	:	Sikkim
District	:	South and West Sikkim
Coordinates	:	27° 09' 16" N, 88° 19' 48" E
Ownership	:	State Forest Department
Area	:	c. 2,000 ha
Altitude	:	400 – 1,000 m
Rainfall	:	Not Available
Temperature	:	Not Available
Biogeographic Zone	:	Himalaya
Habitats	:	Tropical Moist Deciduous Forest, Tropical Secondary Scrub

IBA CRITERIA: A1 (Threatened Species), A2 (Endemic Bird Area 130: Eastern Himalayas);
A3 (Biome-9: Indo-Chinese Tropical Moist Forests)
PROTECTION STATUS: Not officially protected

GENERAL DESCRIPTION

Much of the South District of Sikkim is populated with townships, villages and agriculture holdings. The lowland forests of Sikkim lie at the southern end of the South District, bound to the south by the Great Rangit river, extending roughly from the foothills of the outer Himalayas to an altitude of about 1,000 m. This IBA includes the river valleys of Ramam, Rangit, Great Rangit and Tista and adjoins the Maenam-Tendong (an IBA) to its north.

Various species of orchids, Rhipidophora, wild banana, screwpines, nettles and giant bamboo are characteristic of this site. The Rangit Valley Sal *Shorea robusta* shows a unique association with the Chir Pine *Pinus roxburghii* (Bejoy Gurung pers. comm. 2003). In patches of protected forest, it is possible to see Sal being slowly dominated by Pine. Such patches are relatively poor in bird life (U. Lachungpa pers. comm. 2003).

AVI FAUNA

Despite being the lowest altitude IBA in Sikkim, this site has records of birds restricted to biomes 9, 8, 7 as well as 5, perhaps due to seasonal altitudinal migration as well as the telescoping effect of the Sikkim Himalaya, where in a distance of c. 100 km, habitats ranging from lowland subtropical forests to high cold desert can be seen (Ali 1962). Hence, as many as 14 globally threatened and restricted range species and at least four Biome-5

species, 15 Biome-7 species, 33 Biome-8 species and seven Biome-9 species have been recorded from this IBA.

The lowland forests of Sikkim are home to several species identified as Near Threatened by BirdLife International (2001): Great Pied Hornbill *Buceros bicornis* now restricted to few sightings over tea estates, Red-breasted Partridge *Arborophila mandelli* (not recorded recently) and Ward's Trogon *Harpactes wardi*. The Nepal Wren-Babbler *Pnoepyga immaculata* could also occur here. During a survey conducted here in 1996, no potential habitat was found for the Rufous-necked Hornbill *Aceros nipalensis*.

Biome-5 species like Ibisbill *Ibidorhyncha struthersii* are regularly recorded in winter on the banks of the Great Rangit river; Wallcreeper *Tichodroma muraria* recorded from Trans-Himalayan Lhonak Valley (at Green Lake) and other high altitude sites is also recorded from this IBA. The Collared Falconet *Microhierax caerulescens* was found breeding in 1996 very close to human habitation, hawking dragonflies around the Fisheries Department pond at Baguwa but cleverly avoiding the mist-nets set around it. Ward's Trogon was sighted at Baguwa and Jorethang in October 1996 (Ganguli-Lachungpa 1996). All these records make this IBA a very interesting bird watching and conservation area.

Poaching is one of the major problems of this IBA.



Photo: Usha Lachungpa

Critically Endangered

Oriental White-backed Vulture	<i>Gyps bengalensis</i>
Slender-billed Vulture	<i>Gyps tenuirostris</i>

Vulnerable

Red-breasted Hill-Partridge	<i>Arborophila mandelli</i>
Rufous-necked Hornbill	<i>Aceros nipalensis</i>
Rusty-bellied Shortwing	<i>Brachypteryx hyperythra</i>
Slender-billed Babbler	<i>Turdoides longirostris</i>
Black-breasted Parrotbill	<i>Paradoxornis flavirostris</i>
Hodgson's Prinia	<i>Prinia cinereocapilla</i>
Beautiful Nuthatch	<i>Sitta formosa</i>

Endemic Bird Area 130: Eastern Himalayas

Ward's Trogon	<i>Harpactes wardi</i>
Rufous-throated Wren-Babbler	<i>Spelaornis caudatus</i>
Wedge-billed Wren-Babbler	<i>Sphenocichla humei</i>
Black-browed Leaf-Warbler	<i>Phylloscopus cantator</i>
White-naped Yuhina	<i>Yuhina bakeri</i>

Important Bird Areas in India - Sikkim

Biome-5: Eurasian High Montane (Alpine and Tibetan)

Ibisbill	<i>Ibidorhyncha struthersii</i>
Grey-backed Shrike	<i>Lanius tephronotus</i>
Hodgson's Redstart	<i>Phoenicurus hodgsoni</i>
Wallcreeper	<i>Tichodroma muraria</i>

Biome-7: Sino-Himalayan Temperate Forest

Common Hill-Partridge	<i>Arborophila torqueola</i>
Darjeeling Pied Woodpecker	<i>Dendrocopos darjellensis</i>
Nepal House-Martin	<i>Delichon nipalensis</i>
Chestnut-headed Tesia	<i>Tesia castaneocoronata</i>
Grey-bellied Tesia	<i>Tesia cyaniventer</i>
Aberrant Bush-Warbler	<i>Cettia flavolivacea</i>
Grey-faced Leaf-Warbler	<i>Phylloscopus maculipennis</i>
Orange-gorgeted Flycatcher	<i>Ficedula strophliata</i>
Ultramarine Flycatcher	<i>Ficedula superciliaris</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>
Fire-capped Tit	<i>Cephalopyrus flammiceps</i>
Yellow-bellied Flowerpecker	<i>Dicaeummelanoxanthum</i>

Biome-8: Sino-Himalayan Subtropical Forest

Rufous-throated Hill-Partridge	<i>Arborophila rufogularis</i>
Elwes's Crake	<i>Porzana bicolor</i>
Slaty-headed Parakeet	<i>Psittacula himalayana</i>
Hodgson's Frogmouth	<i>Batrachostomus hodgsoni</i>
Blyth's Kingfisher	<i>Alcedo hercules</i>
Golden-throated Barbet	<i>Megalaima franklinii</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>
Orange-bellied Chloropsis	<i>Chloropsis hardwickii</i>
Slaty-backed Forktail	<i>Enicurus schistaceus</i>
Grey-sided Laughingthrush	<i>Garrulax caerulatus</i>
Red-faced Liocichla	<i>Liocichla phoenicea</i>
Rusty-cheeked Scimitar-Babbler	<i>Pomatorhinus erythrocyneus</i>
White-hooded Babbler	<i>Gampsorhynchus rufulus</i>
Blue-winged Minla	<i>Minla cyanouroptera</i>
Rufous-backed Sibia	<i>Heterophasia annectans</i>
Black-chinned Yuhina	<i>Yuhina nigrimenta</i>
Grey-headed Parrotbill	<i>Paradoxornis gularis</i>
Lesser Rufous-headed Parrotbill	<i>Paradoxornis atrosuperciliaris</i>
Greater Rufous-headed Parrotbill	<i>Paradoxornis ruficeps</i>
Slaty-bellied Tesia	<i>Tesia olivea</i>
Small Niltava	<i>Niltava macgrigoriae</i>
Maroon Oriole	<i>Oriolus traillii</i>
Grey Treepie	<i>Dendrocitta formosae</i>
Black-browed Treepie	<i>Dendrocitta frontalis</i>

Biome-9: Indo-Chinese Tropical Moist Forest

Himalayan Golden-backed Woodpecker	<i>Dinopium shorii</i>
Pale-headed Woodpecker	<i>Gecinulus grantia</i>
Black-backed Forktail	<i>Enicurus immaculatus</i>
Greater Necklaced Laughingthrush	<i>Garrulax pectoralis</i>
Sultan Tit	<i>Melanochlora sultanea</i>
Crow-billed Drongo	<i>Dicrurus annectans</i>

OTHER KEY FAUNA

The lowland fauna includes Golden Jackal *Canis aureus*, Leopard Cat *Prionailurus bengalensis*, Himalayan Crestless Porcupine *Hystrix brachyura*, Assamese Macaque *Macaca assamensis*, Barking Deer *Muntiacus muntjak*, Tree Shrew *Tupaia belangeri*, squirrels, fruit bats, a host of butterflies and other invertebrates, riverine fish (over 40 species), Indian Rock Python *Python molurus*, geckos, freshwater frogs and toads.

LAND USE

- q Agriculture
- q Forestry
- q Nature conservation and research
- q Watershed management
- q Urban / Industrial / Transport

THREATS AND CONSERVATION ISSUES

- q Forest fires
- q Disturbance to birds
- q Spread of weeds and exotic snails
- q Urbanization and effects
- q Use of biocides for agriculture

The lowland forests of Sikkim have not yet been included in the Protected Area Network of the State. However a representative area of the Kitam Reserve Forest was proposed to be notified as a Bird Sanctuary (Sandeep Tambe pers. comm. 2003).

Population-wise, the entire South District of Sikkim is second largest after the East District. There are 144 inhabited revenue blocks. This area has been experiencing frequent occurrences of forest fire and was selected as a case study for watershed analysis (Sandeep Tambe pers. comm. 2003).

Habitat loss and fragmentation: The original forest as seen on the Survey of India map of more than 20 years ago, all along the course of the Rivers Tista and Great Rangit, is today a very narrow forest belt fragmented for the most part. Lowland forested areas between Jorethang and Melli are comprised of the Reserve Forests of Majhitar, Kitam and Melli-Ralu-Sumbuk. A metalled road runs right through carrying heavy vehicular traffic. The major townships of Jorethang, Melli and Rangpo are all along this route. The area has also been set aside as the industrial development zone with a range of establishments from a small glass factory to the Manipal University complex, beer factories and LPG bottling plant. New hydroelectric projects have also been taken up in this zone.

Timber poaching from across the state border was reported by local people as the principal cause of lack of old large trees especially Teak *Tectona grandis*. In-depth study and long term monitoring of the lowland forests, especially the vanishing Sal forest belt of Sikkim is urgently required.

Livestock grazing: Cattle were grazed in almost all forest areas till a ban on grazing in reserve forests was instituted in 2002. Spread of weeds like Lantana, Mikania and Eupatorium is noticeable in many areas. In recent years, the spread of an accidentally introduced exotic species of snail has been reported to be causing crop damage. Use of biocides in agriculture is being phased out by the State government in an effort to become an 'organic state'.

Dynamiting and poisoning of water for fish: People reported this all along the Ramam Khola and at Manpur below Kitam.

There is evidence of forest fires in parts of Kitam where several scorched Chir Pines can be seen.

In addition to the above-mentioned biotic pressures, Kitam forest also has the problem of succession of the natural Sal stands by the Chir Pine *Pinus roxburghii* which is fire resistant. There was a clear shortage of bird life in the Pine stands as compared to Sal

The Barking Deer is commonly seen in this IBA.

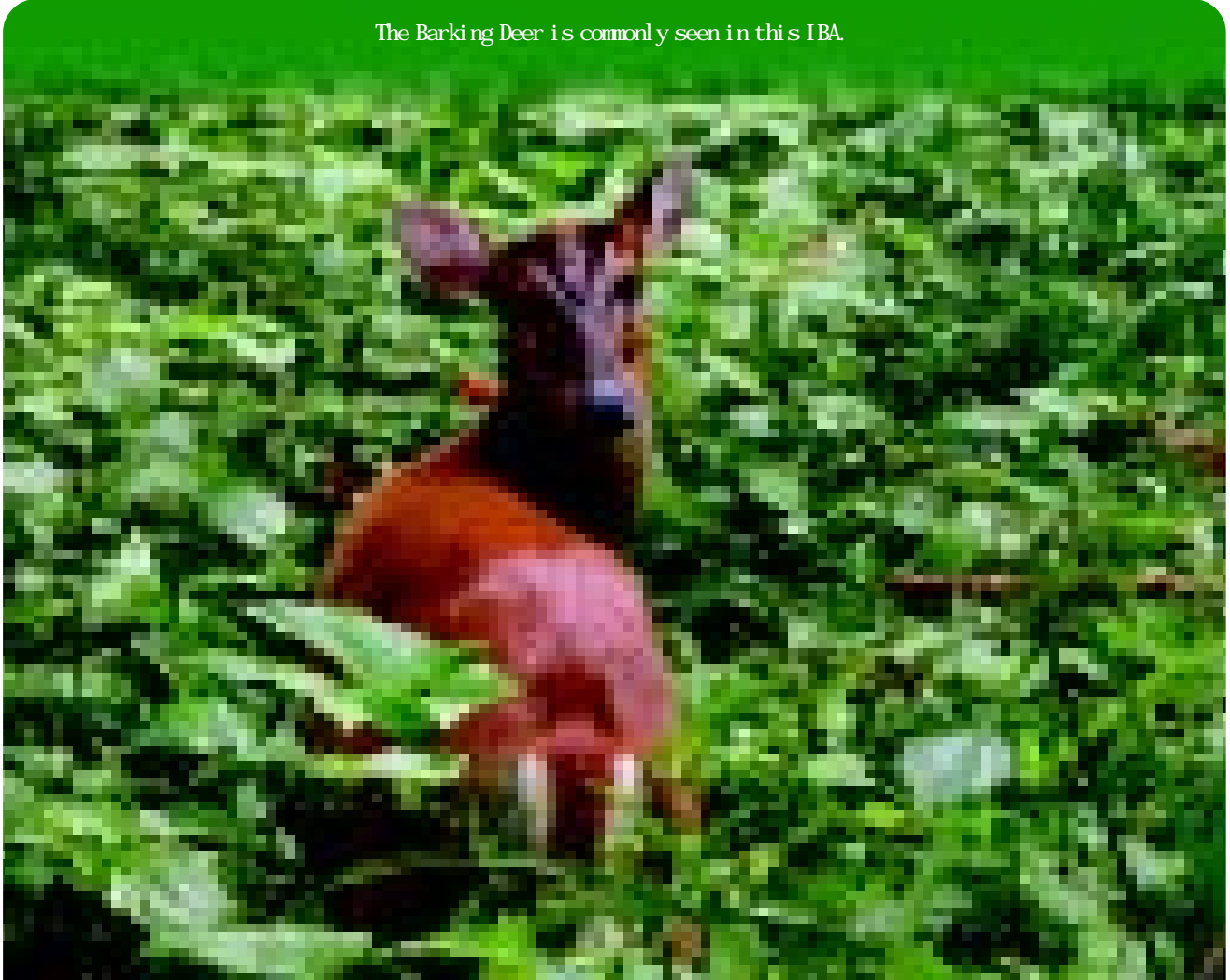


Photo: M. Zafar-ul-Islam

patches though the exact quantification has not been done. Since this IBA is used more like a thoroughfare even by bird watchers passing through to more popular birding, trekking or tourism destinations in higher altitudes, there is a real lack of ecological information from this zone. Sightings of Kaleej Pheasant very close to human habitation or along the Melli-Jorethang road are no longer common (Ganguli-Lachungpa 1996). Indian Peafowl in Kitam introduced from Punjab over three decades ago by the State Forest Department (S. T. Bhutia pers. comm. 2003) seem to be thriving and villagers sometimes complain of crop depredation. Study is also needed to check for genetic dilution in Red Junglefowl near villages in this IBA.

KEY CONTRIBUTORS

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KEY REFERENCES

- Ali, S. (1962) The Birds of Sikkim. Oxford University Press, Madras.
- BirdLife International (2001) Threatened Birds of Asia: The BirdLife International Red Data Book. BirdLife International, Cambridge, UK.
- Ganguli-Lachungpa, U. (1996) Baseline Bird Survey in Proposed Kitam Wildlife Sanctuary and other low-land forests of South Sikkim. Report submitted to Oriental Bird Club (Unpublished).