Arun K. Bose, Jon Curson & Nigel Jarman (1989)

Report on birth in some national parter of other areas of special interest in India & Negal '88/'89

KINGDOM OF NEPAL:

PULCHOWKI MOUNTAIN & GODAVARI.

CHITWAN NATIONAL PARK, MEGHAULI/ TIGER TOPS.

KOSI BARRAGE.

MAI KHOLA.

Arun. Bose et.al.



Notes on Pulchowki Mountain and Godavari, Kathmandu Valley. Nepal.

27 February - 4 March & 1 - 5 April 1989

#### Introduction

The village of Godavari lies 18km. south-east of Kathmandu at the base of the 9000' high Pulchowki Mountain. Most of the land around Godavari is completely given over to agriculture, although there is a Botanical Garden in the village itself, which holds many interesting species (of birds as well as plants).

Pulchowki Mountain is 9000' high. There is a large quarry at its base, just above Godavari, where stone is blasted for use in road construction. The lowest part of the mountain (the first 2-300' up from the village) have been completely deforested and dense scrub now covers the area. Apart from this, Pulchowki is still more or less completely forested right to the top, despite increasing pressure from fuel and fodder cutting from local people. Mixed temperate forest predominates on the lower slopes, giving way to evergreen temperate (coniferous) forest near the top.

There is a rough road leading up to the top of the mountain and numerous small footpaths made by villagers collecting fodder and firewood. Access is unrestricted although it is unwise to walk across the quarry due to frequent rock falls.

### State of the forest

As just mentioned, the first few hundred feet up the mountain from Godavari has no forest left at all. The quarry, just above the village, has destroyed, not only all the forest in the area, but most of the mountain as well!

Above the quarry and the scrub the forest is still in a fairly good state away from the road and main paths, with a 40% or more crown cover and undisturbed understorey over large areas. This is not the case near the road and the main paths however. Here, there is much evidence of damage to the understorey (due to collecting of brush for fodder and fuel) and the crown cover is less than 40% (often considerably less) due to tree felling.

We would estimate that, on the upper and middle slopes, there is 80% forest cover and, of this, 66% is good quality with a 40% or more crown cover and a relatively undisturbed understorey.

#### Threats to the forest

Pulchowki is gravely threatened, despite being one of the two most nationally important unprotected (at present) forest in eastern Nepal. Local villagers daily cut the undergrowth and small trees for fodder and fuel and, on most mornings, a virtually endless stream of people carrying brush can be seen coming down from near the top of the mountain. Pulchowki cannot stand this for much longer without suffering permanent damage.

At present, Pulchowki is unprotected, although there have been recent moves to change this. At a meeting in Kathmandu at the end of 1989 it was decided, subject to the King's approval, to give Pulchowki 'protected forest' status (C. Inskipp verbally). Whether this will be adequately enforced and whether it will make much difference in the short term, especially with the continuing dispute over the Trade Treaty with India causing chronic fuel shortages, remains to be seen.

#### Significant bird species

Although not listed as threatened by I.C.B.P., Mountain Hawk Eagle, Common Hill Partridge, Bar-tailed Cuckoo Dove, Striated Green Bulbul, Striated, Rufous-chinned and Grey-sided Laughing Thrushes, Cutia, White-browed Blue Flycatcher, Chestnut-headed Tesia, Black-faced Warbler, Gold-naped Black Finch and Brown Bullfinch may all be indicators of original forest and many of these are species for which Nepal may hold internationally significant populations. This is a testament to the importance of Pulchowki's forests.

In addition to these, Woodpigeon and Blackbird are apparantly rare in the Kathmandu Valley.

## Suggestions for further study

All records of birds from Pulchowki are valuable, especially those which may be ancient forest indicators (Ie those species which the literature states are restricted to original forest) and species lists, with numbers, would be most welcome.

Also, there has apparantly been a recent record of Bluenaped Pitta (Pitta nipalensis) from Pulchowki. This is the first record of this species here for many years (about 10 as far as we know) and it would be useful to know the present status of this species here. Annotated Species List for Pulchowki Mountain and Godavari, Kathmandu Valley, Nepal.

Species marked \* only seen at Godavari.

27 February - 4 March & 1 - 5 April 1989

Indian Pond Heron\* (Ardeola grayii) 2 seen regularly.

Black Kite (Milvus migrans) Occassional.

Shikra (Accipiter badius) 4 seen regularity.

Besra (A. virgatus) 2 seen.

Long-legged Buzzard (Buteo rufinus) 1 seen.

Mountain Hawk Eagle (Spizaetus nipalensis) 1 seen.

Indian White-backed Vulture (Gyps bengalensis) Occassional.

Crested Serpent Eagle (Spilornis cheela) 6 seen.

Common Hill Partridge (Arborophila torqueola) 4 seen.

Kalij Pheasant (Lophura leucomelana) Fairly common.

Woodpigeon (Columba palumbus) 20 seen.

Bar-tailed Cuckoo Dove (Macropygia unchall) 2 seen.

Rufous Turtle Dove (Streptopelia orientalis) Common.

Large Hawk Cuckoo (Cuculus sparverioides) Fairly common in April.

Oriental Cuckoo (C. saturatus) Fairly common in April.

Collared Pygmy Owlet (Glaucidium brodiei) Fairly common.

White-breasted Kingfisher\* (Halycon smyrnensis) Occassional.

Blue-throated Barbet (Megalaima asiatica) Occassional.

Speckled Piculet (Picumus innominatus) Occassional.

Black-naped Green Woodpecker (Picus canus) 2 seen.

Rufous-bellied Woodpecker (Picoides hyperythrus) 1 seen.

Darjeeling Pied Woodpecker (P. darjellensis) 1 seen.

Crimson-breasted Pied Woodpecker (P. cathpharius) 1 seen.

Brown-fronted Pied Woodpecker (P. auriceps) Occassional.

Fulvous-breasted Pied Woodpecker (P. macei) Fairly common.

Red-rumped Swallow (Hirundo daurica) Fairly common.

Nepal House Martin (Delichon nipalensis) 5 seen.

Rufous-backed Shrike (Lanius schach tricolor) - Black-headed race Fairly common.

Grey-backed Shrike (L. schach tephronotus) Occassional.

Common Myna (Acridotheres tristis)

Jungle Myna (A. fuscus) Fairly common.

Jay or Acorn Jay (Garrulus glandarius)

Lanceolated or Black-throated Jay (G. lanceolatus) Common.

Red-billed Blue Magpie#(Urocissa erythrorhyncha) Occassional.

Himalayan Tree Pie (Dendrocitta formosae) Occassional.

House Crow (Corvus splendens)
Common.

Jungle Crow (C. macrorhymchos)

Pied Flycatcher-Shrike (Hemipus picatus) Fairly common.

Long-tailed Minivet (Pericrocotus ethologus) Fairly common.

Red-vented Bulbul (Pycnonotus cafer) Common.

White-cheeked Bulbul (P. leucogenys) Common.

Black Bulbul (Hypsipetes madagascariensis)

Rufous-bellied Bulbul (H. mclellandi) 2 seen.

Striated Green Bulbul (Pycnonotus striatus) Occassional.

Rufous-necked Scimitar Babbler (Pomatorhinus ruficollis) Occassional.

Rusty-cheeked Scimitar Babbler (P. erythrogenys) Occassional.

Red-billed Babbler (Stachyris pyrrhops) Fairly common.

Orange or Nepal Parrotbill (Paradoxornis nipalensis) Occassional.

White-throated Laughing Thrush (Garrulax albogularis) Common.

Striated Laughing Thrush (G. striatus)

Rufous-chinned Laughing Thrush (G. rufogularis) Occassional.

Grey-sided Laughing Thrush (G. caerulatus) Occassional.

Streaked Laughing Thrush (G. lineatus) Fairly common.

Red-headed Laughing Thrush (G. erythrocephalus) Common.

Pekin Robin (Leiothrix lutea) Fairly common.

Nepal Cutia (Cutia nipalensis) 2 seen on 2 occassions.

Green Shike Babbler (Pteruthius xanthochlorus) 2 seen.

Hoary Barwing (Actinodura nipalensis) 2 seen.

Bar-throated Minla (Minla strigula) Fairly common.

Yellow-naped Yuhina (Yuhina flavicollis) Common.

Stripe-throated Yuhina (Y. gularis) Common.

Rufous-vented Yuhina (Y. occipitalis)

Chestnut-headed Fulvetta or Tit-babbler (Alcippe castaneceps) Fairly common.

White-browed Fullvetta or Tit-babbler (A. vinipectus)

Nepal Fulvetta or Babbler (A. nipalensis) Occassional.

Black-capped Sibia (Heterophasia capistrata) Common.

Sooty Flycatcher (Muscicapa sibirica) 2 seen.

Orange-gorgetted Flycatcher (Ficedula strophiata) Fairly common.

White-browed Blue Flycatcher (F. superciliaris) l seen in April.

Small Niltava (Niltava macgrigoriae) 3 seen.

Rufous-bellied Niltava (N. sundara) 2 seen.

Verditer Flycatcher (Eumyias thalassina) Common in April.

Grey-headed Flycatcher (Culicicapa ceylonensis) Common.

Yellow-bellied Fantail (Rhipidura hypoxantha) Common.

White-throated Fantail (R. albicollis) Occassional.

Chestnut-headed Tesia (Tesia castaneocoronata) 3 seen.

Aberrant Bush Warbler (Cettia flavolivacea) Fairly common.

Rufous-capped Bush Warbler (C. brunnifrons) 2 seen.

Tailorbird (Orthotomus sutorius) Fairly common.

Yellow-browed Warbler (Phylloscopus inornatus) Common.

Pallas' Warbler (P. proregulus) Common.

Grey-faced Warbler (P. maculipennis) Common.

Orange-barred Warbler (P. pulcher) Common.

Golden-spectacled Warbler (Seicercus burkii) Occassional.

Chestnut-headed Warbler (S. castaniceps) Occassional.

Grey-headed Warbler (S. xanthoschistos) Common.

Black-faced Warbler (Abroscopus schisticeps) Fairly common.

Goldcrest (Regulus regulus) Occassional.

Red-flanked Bluetail (Erithacus cyanurus) Fairly common.

Black Redstart (Phoenicurus ochruros) Occassional.

Hodgson's Redstart (P. hodgsoni) Occassional.

Blue-fronted Redstart (P. frontalis) Common.

White-throated Redstart (P. schisticeps) 2 seen.

Plumbeous Redstart (P. fuliginosus) Fairly common.

River Chat (P. leucocephalus) Fairly common.

Spotted Forktail\* (Enicurus maculatus)
Occassional.

Stonechat (Saxicola torquata) Occassional.

Dark Grey Bush Chat (S. ferrea) Common.

Chestnut-bellied Rock Thrush (Monticola rufiventris) Fairly common in April.

Blue Whistling Thrush (Myiophonus caeruleus) Common.

Blackbird (Turdus merula) 1 male seen.

White-collared Blackbird (T. albocinctus) Fairly common.

Grey-winged Blackbird (T. boulboul) Fairly common.

Grey-headed Thrush\*(T. rubrocanus)
l seen.

Black-throated Thrush (T. ruficollis strogularis)

Green-backed Tit (Parus monticolus)

Yellow-cheeked Tit (P. xanthogenys) Common.

Yellow-browed Tit (Sylviparus modestus) Common.

Red-headed Tit (Aegithalos concinnus)

Chestnut-bellied Nuthatch (Sitta castanea) Occassional.

White-tailed Nuthatch (S. himalayensis) Fairly common.

Fire-breasted Flowerpecker (Dicaeum ignipectus) Fairly common.

Fire-tailed Sumbird (Aethopyga ignicauda) Fairly common.

Nepal Yellow-backed Sunbird (A. nipalensis) Fairly common.

Black-breasted Sumbird (A saturata) 2 seen.

Tree Sparrow (Passer montanus)

Himalayan Greenfinch (Carduelis spinoides) 5 seen.

Tibetan Serin\* (Serinus thibetanus)
Max. of 70 in Godavari Botanical Gardens.
25 still present on April 5.

Red-headed Rosefinch (Pinicola subhimachalus) 2 seen.

Gold-naped Black Finch (Pyrrhoplectes epauletta) 3 seen.

Brown Bullfinch (Pyrrhula nipalensis) 1 flock of 8 seen.

Little Bunting\* (Emberiza pusilla) 1 flock of 15 seen.

Notes on the Kosi Barrage area, eastern Nepal.

7 - 10 March 1989

#### Introduction

Kosi Barrage lies in the Nepal terai, close to the border with Bihar (India), about 150 miles south-east of Kathmandu. The barrage was built to control the flow of the River Kosi into Bihar and has created a large area of marsh, reed bed, open water and sandy islands in the area immediately to the north. The position of the sandy islands and the course of the river to the south of the barrage vary according to the regulated flow of water through the barrage and can change rapidly. The wetland area immediately to the north is unprotected, although there is the Kosi Tapu Nature Reserve approximately 6 miles north of the barrage and there are plans to extend this further to the south to encompass some of this wetland area.

To the south and south-west of the barrage the land is dry, semi-arid grassland and is partly cultivated. There is some cultivation to the north-west of the barrage as well but the main human activity in this area is extensive fishing in the open water.

The whole of this wetland area forms probably the most important area in Nepal for wetland birds, especially for wintering and migrating wildfowl, shorebirds, storks and herons. Raptors are also well represented in the area.

#### Threats to the habitat

None of the area we visited is protected (although, as previously mentioned, there are plans to extend the Kosi Tapu Nature Reserve further south to encompass some of it) and so it must be regarded as potentially threatened, although there does not seem to be any immediate danger. The limited cultivation does not seem to be significantly altering the habitat at present. The main threat is probably from the barrage itself, which causes large fluctuations in the daily flow and direction of the river; although of course the barrage was largely responsible for creating and maintaining this area in the first place.

It has been suggested that a significant change in the course of the river over the last year may have been at least partly responsible for displacing the small populations of Bengal Florican and Indian Courser from the area. Both are very rare birds in Nepal and the former is threatened throughout its range. (C. Inskipp verbally).

## Significant bird species

Six species listed as threatened by I.C.B.P. were seen:-Greater Adjutant, Lesser Adjutant, Pallas' Sea Eagle, White-tailed Sea Eagle, Eurasian Black Vulture and Hodgson's Bush Chat. See species list for details.

Also seen were 2 Black-necked Storks which, although not yet listed as threatened by I.C.B.P., seem to be disappearing fast and are giving cause for concern.

The two species which we were particularly looking for, Bengal Florican and Indian Courser, we were unable to find. Both have occurred on the arid grassland to the south-west of the barrage but we did not find either there, despite searching for two days.

There had been a report of 1 Indian Courser from this area, by a Danish birder who visited the area 3 weeks before we did. Kosi is one of the only places in Nepal where this species occurs

Bengal Florican had last been reported from the area we were searching the year previously, 1988 (C. Inskipp verbally). We asked the local peasant farners if they had seen Bengal Florican in the area, using two Nepali friends as interpreters. They pointed out several birds they had seen in the area from the plates in the Pictoral Guide but were certain they had not seen Floricans.

# Suggestions for further study

We feel that further searches should be made for Bengal Florican to see if it still occurs in the area. These searches should be concentrated on the grassland between 3 and 6 km. south-west of the barrage and on the large island directly to the south of the barrage. We were unable to search thrsr areas thoroughly, due to lack of time, but they both have suitable habitat. The birds may have moved to grassland to the north of the barrage and it would also be worth searching this area.

Further counts in the unprotected barrage area by visiting birders would be useful to monitor the numbers of birds using this area, especially in winter and on migration.

It should be noted that we missed the peak wildfowl migration (which is normally end February/ beginning of March) but we still had very high counts of Pintail and Gadwall.

Amnotated Species List for the Kosi Barrage area, E. Nepal. 7 - 10 March 1989

Great Crested Grebe (Podiceps cristatus) 6 seen.

Little Grebe (Tachybaptus ruficollis) 4 seen.

Great Cormorant (Phalocrocorax carbo) Common, 40 seen.

Little Cormorant (Halietor niger) Fairly common, 25 seen.

Grey Heron (Ardea cinerea) Fairly common, 25 seen.

Purple Heron (A. purpurea) Common, 40 seen.

Great Egret (Egretta alba) Fairly common, 30 seen.

Intermediate Egret (E. intermedia) Common, 100 seen.

Little Egret (E. garzetta) Common, 250 seen.

Cattle Egret (Bubulcus ibis) Common, 50 seen.

Indian Pond Heron (Ardeola grayii) Common, 60 seen.

Bittern (Botauris stellaris)
1 seen.

Spoonbill (Platalea leucorodia) 6 seen.

Painted Stork (Mycteria leucocephala) 5 seen.

Openbill Stork (Anastomus oscitans) Common, 60 seen.

White-necked Stork (Ciconia episcopus) 6 seen.

Black-necked Stork (Ephippiorhynchus asiaticus) 2 seen.

Greater Adjutant (Leptoptilos dubius) 1 seen.

Lesser Adjutant (L. javanicus) At least 10 seen.

Bar-headed Goose (Anser indicus) 1 flock of 28 flying over.

Lesser Whistling Duck (Dendrocygna javanica) Common, 170 seen.

Shelduck (Tadorna tadorna) 2 seen.

Ruddy Shelduck (T. ferruginea) Common, 150 seen.

Pintail (Anas acuta) Common. 3000 seen.

Teal (A. crecca) Common, 100 seen.

Spotbilled Duck (A. poecilorhyncha) 5 seen.

Mallard (A. platyrhynchos) 10 seen.

Gadwall (A. strepera) Common, 2000 seen.

Wigeon (A. penelope) Common, 150 seen.

Garganey (A. querquedula) Fairly common, 40 seen.

Shoveler (A. clypeata) Common, 150 seen.

Black-winged Kite (Elanus caeruleus) 4 seen.

Black Kite (Milvus migrans) Common.

Shikra (Accipiter badius) 2 seen.

Steppe Eagle (Aquila rapax nipalensis) 2 seen.

Spotted Eagle (A. clanga) ladult seen.

Lesser Spotted Eagle (A. pomarina) 1 immature seen.

White-tailed Eagle (Haliaeetus albicilla) l immature seen.

Pallas' Sea Eagle (H. leucoryphus) I immature seen.

European Black Vulture (Aegypius monachus) 3 seen.

Indian White-backed Vulture (Gyps bengalensis) Fairly common, 10 seen.

Hen Harrier (Circus cyaneus)
1 seen.

ļ

Pied Harrier (C. melanoleucos) 5 seen.

Marsh Harrier (C. aeruginosus) 10 seen.

Osprey (Pandion haliaetus) 3 seen.

Peregrine (Falco peregrinus)
1 seem.

Red-headed Merlin (F. chicquera) 2 seen.

Kestrel (F. tinnunculus)
1 seen.

Moorhen (Gallinula chloropus) 2 seen.

Purple Gallinule (Porphyrio porphyrio) Common, 60 seen.

Pheasant-tailed Jacana (Hydrophasianus chirurgus) Common, 30 seen.

Bronze-winged Jacana (Metopidius indicus) Fairly common. 10 seen.

Great Stone Plover (Esacus recurvirostris) 3 seen.

Little Pratincole (Glareola lactea) Common, 150 seen.

Lapwing (Vanellus vanellus) 30 seen.

Red-wattled Lapwing (V. indicus) 10 seen.

Grey-headed Plover (V. cinereus) 6 seen.

Little Ringed Plover (Charadrius dubius)

1 seen.

Kentish Plover (C. alexandrinus) 4 seen.

Greenshank (Tringa nebularia) 20 seen.

Green Sandpiper (T. ochropus) 3 seen.

Common Sandpiper (Actitis hypoleucos) 20 seen.

Common Snipe (Gallinago gallinago) 5 seem.

Little Stint (Calidris minuta) 1 seen.

Temminck's Stint (C. temminckii) l seen.

Great Black-headed Gull (Larus ichthyaetus) 15 seen.

Black-headed Gull (L. ridibundus) Common, 50 seen.

Gull-billed Term (Gelochelidon milotica) 6 seen.

Caspian Tern (Hydroprogne caspia) 20 seen.

Common Tern (Sterna hirundo) 10 seen.

Indian River Tern (S. aurantia) Common, 60 seen.

Black-bellied Tern (S. melanogaster)

1 seen.

Little Term (S. albifrons) Common, 40 seen.

Collared Dove (Streptopelia decaocto)

Spotted Dove (S. chinensis) Common.

Coucal (Centropus sinensis) 2 seen.

Spotted Owlet (Athene brama) I seen.

Short-eared Owl (Asio flammeus) 4 seen.

Lesser Pied Kingfisher (Ceryle rudis) 6 seen.

Common Kingfisher (Alcedo atthis)

White-breasted Kingfisher (Halycon smyrmensis)

Little Green Bee Eater (Merops orientalis) 8 seen.

Indian Roller (Coracius benghalensis)
5 seen.

Hoopoe (Upupa epops) 2 seem.

Coppersmith (Megalaima haemacephala) 2 seen.

Bush Lark (Mirafra assamica) Common.

Ashy-crowned Finch Lark (Eremopterix grisea) Fairly common.

Short-toed Lark (Calandrella cinerea) Common, flock of 400 seen.

Sand Lark (C. raytal) Fairly common, 15 seen.

Oriental Skylark (Alauda gulgula) Common, 40 seen.

Brown-throated or Plain Sand Martin (Riparia paludicola) Common, 120 seen.

Rufous-backed Shrike (Lanius schach tricolor) Black-headed race 5 seen.

Brown Shrike (L. cristatus) Fairly common, 10 seen.

Black Drongo (Dicrurus macrocercos) Common, 50 seen.

Pied Myna (Sturnus contra) Common.

Common Myna (Acridotheres tristis)

Bank Myna (A. ginginianus) Common, 25 seen. House Crow (Corvus splendens)

Jungle Crow (C. macrorhynchos) Common.

Red-vented Bulbul (Pycnonotus cafer)

Striated Babbler (Turdoides earlei) 15 seen.

Verditer Flycatcher (Eumyias thalassina) 1 seen.

Blyth's Reed Warbler (Acrocephalus dumetorum) 1 seen.

Paddyfield Warbler (A. agricola) 3 seen.

Fam-tailed Warbler (Cisticola juncidis) Common, 30 seen.

Aberrant Bush Warbler (Cettia flavolivacea) 3 seen.

Striated Marsh Warbler (Megalurus palustris) 3 seen.

Streaked or Graceful Prinia (Prinia gracilis) 8 seen.

Indian Prinia (P. subflava) Fairly common.

Yellow-bellied Prinia P. flaviventris) 4 seen.

Chiffchaff (Phylloscopus collybita) Fairly common.

Dusky Warbler (P. fuscatus) Fairly common.

Smoky Warbler (P. fuligiventer) 3 seen.

Yellow-browed Warbler (P. inornatus) 5 seen.

Bluethroat (Erithacus svecicus) Fairly common.

Stonechat (Saxicola torquata)
Common.

Hodgson's Bush Chat (S. insignis) 1 male seen.

Pied Bush Chat (S. caprata) Fairly common, 10 seen.

Black-throated Thrush (Turdus ruficollis atrogularis) Fairly common, 10 seen.

Paddyfield Pipit (Anthus novaeseelandiae) Common, 60 seen.

Richard's Pipit (A. n. richardi) 1 seen.

Olive-backed Pipit (A. hodgsoni) 4 seen.

Rosy Pipit (A. roseatus) Common, 150 seen.

Citrine Wagtail (Motacilla citreola) Common, 40 seen.

Yellow Wagtail (M. flava) Common, 20 seen.

White Wagtail (M. alba) Common, 40 seen.

Large Pied Wagtail (M. madaraspatensis) Fairly common, 15 seen.

House Sparrow (Passer domesticus)

Red Avadavat (Amandava amandava) Fairly common, 15 seen.

Yellow-breasted Bunting (Emberiza aureola) Fairly common, 15 seen.

Notes on the Mai Valley, eastern Nepal.

#### 12 - 31 March 1989

#### Introduction

This is only a brief resume of our survey of the Mai Valley, in line with the rest of our report. To do this section we joined Gillian McKnight who was conducting a detailed study of the Mai Valley for I.C.B.P. For a more detailed analysis, therefore, refer to the survey of the Mai and Tamur Valleys, November 1988 - March 1989 (Halliday and McKnight - in prep.)

The Mai Valley is the easternmost valley in Nepal, almost on the border with Darjeeling. The upper part (above the town of Ilam) consists of lower temperate mixed forest and the lower part (between Ilam and Birtamond) os subtropical and tropical deciduous, sal and evergreen forest.

Above the Mai Valley a trail leads up to Sandakphu (Santapur) and here the forest is upper temperate (coniferous) with patches of ringal bamboo. This trail apparantly forms the border between Nepal and Darjeeling.

In the upper Mai watershed, as far down as the small settlement of Hanga Tham, there is an extensive area, approximately 100 sq. km., of relatively undisturbed mixed temperate forest with limited grazing and a small amount of land cleared for agriculture near the settlements of Gauribas, Jolbarrie and Hanga Tham. Between Hanga Tham and Ilam the remaining foredt is restricted to the river banks and the rest of the land consists of cultivation and bamboo groves (the bamboo groves hold some interesting species).

In the steep part of the valley below Ilam there is good quality subtropical forest along the river banks and in isolated patches on steep hillsides. In the lower Mai, between Chisapani Bridge and Birtamond, the land is mainly cultivation and groves. The remaining tropical sal and evergreen forest is very fragmentary. There is a fairly extensive patch just north of Sukhani but even this is being severely damaged by grazing, tree felling and fodder cutting.

The Mai Valley is especially important as it contains the largest area of original forest left in eastern Nepal and 80 (70%) of the 115 forest breeding bird species for which Nepal may hold internationally significant populations have now been recorded here (Halliday in litt.).

## State of the forest

In the upper Mai, above Hanga Tham, the forest cover is about 75% and is good quality with more than 40% crown cover. Even here, however, tree felling, fodder cutting and grazing is a problem, although large patches of the forest remain relatively undisturbed, with a good understorey, at present.

In the rest of the Mai Valley, the forest cover is much reduced and is largely restricted to the river banks and tributaries with occassional larger patches, especially on steep hillsides. Here the forest is also much more damaged through grazing, fuel and fodder cutting and so on. In our estimation there is very little forest in the lower Mai (below Ilam) with a greater than 40% crown cover ( the main exception to this being parts of the sal forest north of Sukhani ).

## Threats to the forest

None of the forest is protected and is still being cleared at a greater or lesser rate throughout the valley. All of the forest can be considered to be under grave threat, although the danger is more immediate in the tropical sal and evergreem forest patches of the lower Mai. As everywhere else, the threats come from cutting for fuel and fodder and grazing of the understorey. According to the local people, 9 people graze cattle in the upper Mai (above Hanga Tham) and they have 4 cows each. The taking of live wood is forbidden but trees are sometimes burned to kill them and then cut 'legally'. While we were at Hanga Tham we heard the sound of trees being felled almost daily.

Further down in the lower Mai, the situation is even worse as the remaining forests are highly fragmented and in a more advanced state of degradation with poorer crown cover and less understorey. The lower Mai is also more populated than the upper and thus the rate of destruction is greater, accounting for the more fragmentary nature of the forest.

One of the problems is that, to the Nepalis, the hearth is sacred and food is prepared in a clay over, fuelled with wood. Therefore, even where kerosine is available, it is only used for lighting and wood is still used for cooking. This, in itself, is only a minor problem but as the population grows it increases the strain on the remaining forest. Increased management of these forests is required, along with stricter controls on grazing.

The forests across the border in Darjeeling have recently been made into a National Park (the Singalila National Park) and, already, the difference in the state of the

forests on the unprotected Nepali and the protected Darjeeling sides is noticable.

## Significant bird species

No species listed as threatened by I.C.B.P. (Collar & Andrew 1988) were seen. However, 6 species were seen which are generally considered to be threatened in Nepal. These were: Short-billed Minivet, Nepal Parrotbill, Plain-coloured Laughing Thrush, Golden-breasted Tit-Babbler, Little Pied Flycatcher and Black-spotted Yellow Tit. The latter has not been recorded anywhere else in Nepal, although it is fairly common in south-east Asia.

The Mai Valley is extremely important as a refuge for several forest species which are threatened in Nepal by habitat destruction. In the I.C.B.P. monograph Nepal's Forest Birds (C. Inskipp 1989) the Mai Valley was identified as being one of the two most important unprotected forests in Nepal, being particularly rich in bird species (Pulchowki Mountain in the Kathmandu Valley was the other). Including the present surveys the Mai Valley has records of 70% of the forest breeding birds for which Nepal may have significant populations. For more details see Nepal's Forest Birds (C. Inskipp 1989) and the report on the surveys of the Mai and Tamur valleys, November 1988 - March 1989 (J. Halliday & G. McKright - in prep.).

For details of the 6 species listed above see species list.

## Suggestions for further study

As this is one of the two most important unprotected forest areas in Nepal it is important to continue monitoring population and species diversity trends and, if possible, to give some sort of protection to the area. A further survey, similar to the one we participated in, should be carried out within the next few years to keep up the pressure on the Nepali Government to take note of this, the most extensive and undamaged forest area in eastern Nepal.

Systematic List of Birds Mai Valley, March 1989

G McKnight J Curson A Bose L Lalchan S Battachan

Itinerary: 12/3/89 Ilam to Mai Khola at Sangu (= below Ilam)

13/3/89 Sangu

14/3/89 Ilam to Jamuna

15/3/89 Jamuna to Hangetham

16/3/89 Hangetham Valley Trail to Goraibas 17/3/89 Chisopani Valley (north)

18/3/89 Hangatham to Jobari

19/3/89 Valley Trail to Goraibas

20/3/89 Hangatham to Kalipokari

21/3/89 Kalipokari to Santapur

22/3/89 Santapur to Hangetham

23/3/89 Chisopani Valley to Jamuna

24/3/89 Jamuna to Chisopani Bridge

25/3/89 Chisopani Bridge 26/3/89 Chisopani Bridge to Lodia

27/3/89 Lodia to Gorowa

28/3/89 Gorowa to Sukani

29/3/89 Sukani

30/3/89 Sukani to Sunischari

Large Cormorant Phalacrocorax carbo 3 Hangetham

Pond Heron Ardeola grayii 1 Jamuna, several Lodia

Cattle Egret Bubulcus ibis Common below Ilam (Savayu)

White-Necked Stork Ciconia episcopus 2 Lodia

Lesser Adjutant Stork Leptoptilos javinicus 1 Lodia

Goosander Mergus merganser 3 below Ilam (Sangu)

Bar-Headed Goose Anser indicus Flock heard flying north Hangetham

Black Kite Milvus migrans 25 circling near Santapur

Goshawk Accipiter gentilis 1 near Santapur

Besra Sparrowhawk Accipiter virgatus 1 Chisapani bridge

Shikra Accipiter badius 1 Jamuna 2 Lodia

Upland Buzzard Buteo hemilasius 2 Ilam 2 Jamuna

Long Legged Buzzard Buteo rufinus 2 Jamuna 1 Kalipokari

Crested Serpent Eagle Spilornis cheela 5 Ilam-Jamuna 1 Ilam 1 Hangetham 1 Lodia

Honey Buzzard Pernis ptilorhyncus 2 Chisapani bridge

Mountain Hawk Eagle Spizaetus nipalensis 2 Hangetham

Spotted Eagle Aquila clanga 1 near Ilam

Black Eagle Ictinaetus malayensis 2 Hangetham

Pied Harrier Circus melanoleucos 1 Jamuna-Ilam

Red Thighed Falconet Microhierax caerulescens 1 Thisopani bridge

Eurasian Kestrel Falco tinnuculus 4 Ilam-Jamuna 1 Hangetham-Kalipokari

Lesser Kestrel Falco naumanni 1 near Santapur (with Black Kites)

Common Hill Partridge Arborophila torquelo 2 Hangetham

Kalij Pheasant Lophura leucomemelana 5 Hangetham

Common Peafowl Pavo cristatus 2 Sukani

Red Jungle Fowl Gallus gallus 8Sukani

Spur Winged Lapwing Vanellus spinosus Pair Chisopani bridge

Green Sandpiper Tringa ochrupus 1 Chisopani bridge Pintail Green Pigeon Treron apicauda 1 Lodia

Grey-Fronted Green Pigeon Treron pompadora Several Lodia

Ashy Woodpigeon Columba pulchricollis 2 Hangetham

Rufous Turtle Dove Streptopelia orientalis Common above Ilam

Spotted Dove Streptopelia chinensis Common below Lodia

Emerald Dove Chalcophaps indica 1 Chisapani bridge 1 below Ilam 1 sukani

Large Parakeet Psittaculla eupatria Flock Sukani

Rose Breasted Parakeet Psittaculla alexandri 5 Sokani 5 Gorowa

Large Hawk Cuckoo Cuculus sparveriodes Calling at Hangetham and Chisapani bridge

Eurasian Cuckoo Cuculus canorus 1 Hangetham 1 Jamuna-Ilam

Large Green Billed Malkola Rhopodytes tristis 1 Chisopani bridge 1 Sukani

Collared Pygmy Owlet Glaucidium brodiei Calling at Hangetham and Chisopani bridge

Brown Hawk Owl Ninox scutulata Calling at Chisopani bridge

Long-Tailed Nightjar Caprimulgus indicus Several Sukani

Red Headed Trogon Harpactes erythrocephalus 1 Chisapani bridge

Indian Roller Coracius bengalensis Several in Lower Mai

Dark Roller Eurystomus orientalis 2 Sukani

Hoopoe Upapa epops 2 Sukani Large Pied Kingfisher Caryle lugubris 1 below Jamuna 2 Chisopani bridge

White Breasted Kingfisher Halcyon smyrnensis 2 Jamuna 1 Lodia 1 Gorowa 1 Sukani

Chestnut Headed Bee-Eater Mereops leschenaulta Fairly Common in Lower Mai

Blue Bearded Bee-Eater Nyctyornis athertoni 2 below Ilam

Pied Hornbill Anthracoceros malabaricus 3 Gorowa-Sukani 3 Sukani

Great Himalayan Barbet Megalaymia virens 2 Sukani 1 Chisopani bridge

Lineated Barbet Megalamia lineata 5 Lodia-Gorowa 3 Sukani

Blue-Throated Barbet Megalamia asiatica 1 Chisopani bridge 2 Lodia

Blue-Eared Barbet Megalaima australis 2 below Ilam (unconfirmed) Crimson-Breasted Barbet Megalaima haemacephala 1 Sunischare

Rufous Piculet Sasia ochracea 1 Ilam-Jamuna

Spotted Piculet Picumnus innominatus 1 Ilam-Jamuna

Grey Crowned Pygmy Woodpecker Dendrocopos canicapillus 2 Lodia 1 Gorowa-Lodia

Large Yellow Naped Woodpecker Picus flavinucha 1 Lodia 1 Sukani

Large Golden Backed Woodpecker Chrysocolaptes lucidus 3 Lodia 5 Gorowa-Sukani

Darjeeling Pied Woodpecker Dendropocus darjellensis 1 Hangetham

Fulvous Breasted Pied Woodpecker Dendrocopus macei 1 Hangetham 2 Sukani

Small Crimson Breasted Pied Woodpecker Dendropocus cathpharius 1 Hangetham 5

Long-Tailed Broadbill Psarisomus dalhousiae 5 below Ilam (Sangu)

Bush Lark Mirafra assamica Several Sunischare

House Swift Apus affinis Several Ilam

Crested Swift Hemiprocne longipennis Several Chisapani bridge Lodia and Sukani

Barn Swallow Hirundo rustica Common Ilam to Sunischare

Striated Swallow Hirundo daurica Several Jamuna-Ilam

Eurasian House Martin Delichon urbica Several Gorowa

Nepal House Martin Delichon nipalensis Common Hangetham

Black-Headed Shrike Lanius schach 1 Hangetham (regularly)

Brown Shrike Lanius cristatus 1 Lodia

Black-Headed Oriele Oriolus xanthornus Several below Ilam Lodia Gorowa Sukani

Black-Naped Oriele Oriolus chinensis 2 below Soktim

Maroon Oriele Oriolus traillii 4 Hangetham

Small Racquet-Tailed Drongo Dicrurus remifer 1 Soktim

Large Racquet-Tailed Drongo Dicrurus paradiseus Several Soktim Gorowa and Sukani

Hair-Crested Drongo Dicrurus hottentottus 2 Jamuna 2 Sukani

Ashy Drongo Dicrurus leucophaeus Several below Ilam Jamuna and Hangetham

Black Drongo Dicrurus adsimilis 3 Hangetham common Ilam-Sunischare Little Bronzed Drongo Dicrurus aeneus 3 Chisopani bridge 5 Sukani

Ashy Wood-Swallow Artamus fuscus 3 Sukani

Spot-Winged Stare Saroglossa spiloptera 12 Sukani

Braminy Myna Stunus pagodarum 6 Sukani

Grey Headed Myna Sturnus malabaricus Several Sukani 2 Jamuna 10 Lodia

Pied Myna Sturnus contra 4 Lodia

Common Myna Acridotheres tristis Common up to Hangetham

Jungle Myna Acridotheres fuscus Flocks at Sukani

Talking Myna Gracula religiosa Several Lodia Gorowa

Eurasian Jay Garrulus glandarius 1 Hangetham

Green Magpie Cissa chinensis 1 Ilam-Jamuna 1 Jamuna

Red-Billed Blue Magpie Cissa erythroryncha 2 below Ilam (Sangu)

Yellow-Billed Blue Magpie Cissa flavirostris 3 Hangetham 3 Hangetham-Santapur

Himalayan Tree Pie Dendrocitta formosae 2 Ilam-Jamuna 4 Hangetham

Nutcracker Nucifraga caryocatactes 1 Kalipokari 1 near Santapur

House Crow Corvus splendens Common

Jungle Crow Corvus macrorhynchos Common

Lesser Wood-Shrike Tephrodornis ponicerianus Several Chisopani bridge-Soktim Large Wood-Shrike Tephrodornis gularis Several Lodia Gorowa Sukani

Pied Wood-Shrike Hemipus picatus Several Chisopani bridge

Large Cuckoo-Shrike Coracina novaehollandiae Several Gorowa

Dark Cuckoo-Shrike Coracina melaschistos 4 Sokani

Short-Billed Minivet Pericrocrotus brevirostris 3 Hangetham

Long-Tailed Minivet Pericrocrotus ethologus 5 Hangetham

Scarlet Minivet Pericrocrocus flammeus Common below Ilam elevation.

Iora Aegithina tiphia Several Ilam-Jamuna Lodia

Golden-Fronted Leaf Bird Chloropsis aurifrons Several Lodia-Sukani

Orange-Bellied Leaf Bird Chloropsis hardwickii Several below Ilam

Black-Headed Yellow Bulbul Pycnonotus melanicteris Fairly common Ilam-Sukani

Red-Whiskered Bulbul Pycnonotus jocosus Several Lodia Sukani

White-Cheeked Bulbul Pycnonotus leucogenes Common below Jamuna

Red-Vented Bulbul Pycnonotus cafer Fairly common Lodia-Gorowa

White-Throated Bulbul Criniger Flaveolus 2 below Ilam (Sangu)

Grey Bulbul Hypsipetes madagascariensis Several below Ilam 3 Lodia

Brown-Eared Bulbul Hypsipetes flavalus 3 Chisopani bridge

Spotted Babbler Pellorneum ruficeps Several Sukani Slaty-Headed Scimiter Babbler Pomatorhinus schisticeps 2 Ilam-Jamuna

Rufous-Necked Scimitar Babbler Pomatorhinus ruficolus 1 calling Jobari

Scaly-Breasted Wren Babbler Pnoepyga albiventor 4 Hangetham

Red-Headed Babbler Stachyris ruficeps Fairly common at Hangetham

Yellow-Breasted Babbler Macronous gularis 5 Chisopani bridge 5 Sukani

Great Parrotbill Conostoma aemodium 2 Hangetham-Kalipokari

Nepal Parrotbill Paradoxornis nipalensis 2 flocks Hangetham

Jungle Babbler Turdoides striatus 2 Ilam-Jamuna

White-Throated Laughing Thrush Garrulax albo Flocks at Hangetham

Large Necklaced Laughing Thrush Garrulax pectoralis Flock Gorowa-Sukani

Red-Headed Laughing Thrush Garrulax erythrocephalus Several Hangetham

Black-Faced Laughing Thrush Garrulax affinis Flocks Hangetham Kalipokari

White-Crested Laughing Thrush Garrulax leucolophus 4 Jamuna

Plain-Coloured Laughing Thrush Garrulax subunicolor Fairly common Hangetham

Fire-Tailed Myzornis Myzornis pyrrhourra 4 Hangetham

Red-Winged Shrike Babbler Pteruthius flaviscapis 1 Hangetham

Green Shrike Babbler Pteruthius xanthochloris 6 Hangetham (in mixed feeding flocks)

Chestnut-throated Shrike Babbler Pteruthius melanotis 4 Hangetham

Hoary Barwing Actinodura nipalensis 5 Hangetham 2 Kalipokari

Red-Tailed Minla Minla ignotincta Fairly common Ilam-Jamuna (bamboo groves)

Bar-Throated Minla Minla strigula Fairly common Hangetham

Blue-Winged Minla Minla cyanouroptera Flocks Ilam-Jamuna

Yellow-Naped Yuhina Yuhina flavicollis 3 Ilam-Jamuna 5 Hangetham

Stripe-Throated Yuhina Yuhina gularis Flocks Hangetham Kalipokari

White-Bellied Yuhina Yuhina zantholeuca Several Chisopani bridge

Rufous-Vented Yuhina Yuhina occipitalis Several Ilam-Jamuna Hangetham

Golden-Breasted Tit Babbler Allcippe chrysotis Flock Hangetham

Chestnut-Headed Tit Babbler Allcippe castaneceps Common Hangetham

White-Browed Tit Babbler Allcippe vinipectus Common Hangetham

Nepal Babbler Allcippe nipalensis Several Ilam-Jamuna

Black-Capped Sibia Heterophasia capistrata Common Hangetham

Sooty Flycatcher Muscicapa sibirica 1 below Ilam (J.Curson/A Bose) Sangu

Brown Flycatcher Muscicapa latirostris 2 Sukani

Red-Breasted Flycatcher Muscicapa parva Several Gorowa-Sukani

Orange-Gorgetted Flycatcher Muscicapa strophiata 1 below Ilam Hangetham Kalipokari

Little Pied Flycatcher Muscicapa westermanni Several Ilam-Jamuna Slaty-Blue Flycatcher Muscicapa leucomelanura 1 below Jamuna

Rusty-Breasted Blue Flycatcher Muscicapa hodgsonii 1 Gorowa-Sukani

Blue-Throated Flycatcher Muscicapa rubeculoides 1 Sukani

Sapphire-Headed Flycatcher Muscicapa sapphira 1 Chisopani bridge (m)

Small Niltava Muscicapa macgrigoriae 1 below Jamuna

Beautiful Niltava Muscicapa sundara 1 below Jamuna 1 Chisapani bridge

Verditer Flycatcher Muscicapa thalassina Fairly common Hangetham Jamuna

Black-Naped Flycatcher Monarcha azurea 1 Chisapani bridge common Gorowa-Sukani

Brook's Flycatcher Muscicapa poloigenys Several Soktim Sukani

Yellow-Bellied Fantail Flycatcher Rhipidura hypoxantha Common Ilam-Hangetham

Grey-Headed Flycatcher Culicicapa ceylonensis Common Ilam-Hangetham

White-Throated Fantail Flycatcher Rhipidura albicollis 1 Hangetham

Slaty-Bellied Ground Warbler Tesia cyaniventer 1 below Ilam (Sangu)

Chestnut-Headed Ground Warbler Tesia castaneo-coronata 4 Hangetham

Strong-Footed Bush Warbler Cettia fortipes 4 Hangetham (clearings in forest)

Blanford's Bush Warbler Cettia pallidipes 1 Jamuna-Ilam

Chinese Bush Warbler Bradypterus tacsanowskius 1 above Hangetham ? (J Curson) Hodgson's Prinia Prinia hodgsonii 1 Ilam-Jamuna Black-Throated Hill Prinia Prinia atrogularis 1 Hangetham (singing)

Tailor Bird Orthotomus sutorius Several Ilam-Sukani

Thick-Billed Warbler Phragamaticola aedon 2 Lodia-Gorowa

Tickell's Leaf Warbler Phylloscopus affinis 1 Lodia-Gorowa

Brown Leaf Warbler Phylloscopus collybita 1 Hangetham

Grey-Faced Leaf Warbler Phylloscopus maculipennis Fairly common Hangetham

Plain Leaf Warbler Phylloscopus inornatus 2 Ilam-Jamuna several Sukani

Orange-Barred Leaf Warbler Phylloscopus pulcher Common Hangetham

Yellow-Rumped Leaf Warbler Phylloscopus proregulus Common Hangetham

Crowned Leaf Warbler Phylloscopus reguloides 1 Gorowa-Sukani

Yellow-Eyed Warbler Seicercus burkii Several Ilam-Jamuna Chisopani bridge

Grey-Headed Warbler Seicercus xanthoschistos Fairly common Hangetham

Chestnut-Crowned Warbler Seicercus castaniceps Several Hangetham

Goldcrest Regulus regulus Several Hangetham-Kalipokari

White-Browed Bush Robin Erithacus indicus 1 above Hangetham

Orange-Flanked Bush Robin Erithacus cyanurus Several Hangetham

Rufous-Bellied Bush Robin Erithacus hyperythrus 1 Hangetham

Shama Copsychus malabarious Several Lodia-Sukani Black Redstart Phoenicurus ochruros 1 Hangetham 1 Sukani

Blue-Fronted Redstart Phoenicurus frontalis Fairly common Hangetham

White-Capped River Chat Chaimarrornis leucocephalus 2 below Ilam 4 Ilam-Jamuna 2 Chisopani bridge (Sangu)

White-Throated Redstart Phoenicurus schisticeps 2 Hangetham-Santapur

Plombous Redstart Rhyacornis fuliginosus 2 Chisopani bridge 2 below Jamuna 2 Hangetham

Little Forktail Enicurus scouleri 2 Hangetham

Black-Backed Forktail Enicurus immaculatus 4 Gorowa-Sukani

Slaty-Backed Forktail Enicurus schistaceus 2 below Ilam 2 Chisopani bridge

Spotted Forktail Enicurus maculatus 2 Ilam-Jamuna

Collared Bush Chat Saxicola torquata Several Jamuna-Hangetham

Dark Grey Bush Chat Saxicola ferrea Common Jamuna-Hangetham (singing)

Chestnut-Bellied Rock Thrush Monticola cinclorhynchus Several Hangetham (singing)

Orange-Headed Rock Thrush Zoothera citrina 1 Sukani

Plain-Backed Mountain Thrush Zoothera mollissima 1 Hangetham

Long-Tailed Mountain Thrush Zoothera dixoni 1 Kalipokari

White-Collared Blackbird Turdus albocinctus Common Hangetham (singing)

Grey-Winged Blackbird Turdus boulboul Several Hangetham (singing)

Whistling Thrush Myiophoneus caeruleus Fairly common Chisopani bridge-Hangetham (singing) Grey-Headed Thrush Turdus rubrocanus 1 Hangetham

Black-Throated Thrush Turdus ruficollis Common Hangetham · Red-Throated Thrush Occassional Hangetham

Wren Troglodytes troglodytes 1 Kalipokari

Brown Dipper Cinclus pallasii 1 below Jamuna 1 Chisapani bridge

Rufous-Breasted Accentor Prunella strophiata Fairly common Hangetham

Maroon-Backed Accentor Prunella immaculata 7 Hangetham

Grey Tit Parus major Fairly common Jamuna-Sukani

Green-Backed Tit Parus monticolus Fairly common Hangetham Jamuna

Yellow-Cheeked Tit Parus xanthogenys 5 Ilam-Jamuna

Black Spotted Yellow Tit Parus spilonotus Several Hangetham (in mixed flock)

Coal Tit Parus ater 1 Hangetham

Sikkim Black Tit Parus rubidiventris beavani Fairly common Hangetham-Santapur

Crested Brown Tit Parus dichrous Fairly common Hangetham-Santapur

Red-Headed Tit Aegithalus concinnus Fairly common-Hangetham

Yellow-Browed Tit Fairly common Hangetham

Rufous-Fronted Tit Aegithalos iouschistos Fairly common Hangetham-Santapur

Chestnut-Bellied Nuthatch Sitta castanea Several Chisapani-Sukani White-Tailed Nuthatch Sitta himalayensa Fairly common Hangetham Kalipokari

Velvet-Fronted Nuthatch Sitta frontalis 2 Ilam-Jamuna 2 Chisopani bridge 2 Sukani

Nepal Tree Creeper Certhia nipalensis 2 Kalipokari-Hangetham

Hodgson's Tree Pipit Anthus hodgsoni Common Hangetham (singing) 10 Lodia-Gorowa

Paddyfield Pipit Anthus novaeseelandiae 2 Jamuna-Ilam

Rose-Breasted Pipit Anthus roseatus Several Hangetham-Santapur

Grey Wagtail Motacilla caspica Several Hangetham Kalipokari

Pied Wagtail Motacilla alba Several Lodia Gorowa

Large Pied Wagtail Motacilla maderaspatensis 2 Chisopani bridge 1 Lodia

Plain Coloured Flowerpecker Dicaeum concolor Several Sukani

Fire-Tailed Sunbird Aethopyga ignicauda 1 Ilam-Jamuna Common Hangetham-Santapur

Mrs Gould's Sunbird Aethopyga gouldiae 2 Ilam-Jamuna 3 Hangetham

Nepal Sunbird Aethopyga nipalensis Common Hangetham Flocks up to Santapur

Scarlet-Breasted Sunbird Aethopyga siparaja 3 below Ilam 1 Chisopani bridge 1 Sukani

Black-Breasted Sunbird Aethopyga saturata 1 Ilam-Jamuna

Purple Sunbird Nectarinia asiatica 1 Ilam-Jamuna

Streaked Spiderhunter Arachnothera magna Fairly common below Ilam 1 Hangetham

White-Eye Zosterops palpebrosa Several Ilam-Jamuna Ilam-Sukani House Sparrow Passer domesticus Common Ilam-Sunischare

Tree Sparrow Passer montanus Several Ilam

Sharp-Tailed Munia Lochura striata Several Ilam

Chaffinch Fringilla coelebs 1 Goraibas (m)

Allied Grosbeak Mycerobas affinis Large flock Kalipokari-Santipur

White-Winged Grosbeak Mycerobas carnipes 3 flocks Kalipokari-Santipur

Nepal Rose Finch Carpodacus nipalensis Several Kalipokari

Gold-Crowned Black Finch Pyrroplectes epauletta Pair Kalipokari

Red-Headed Bullfinch Pyrrula erythrocephala Several above Hangetham

Pine Bunting Emberiza leucocephalos Several Kalipokari (J Curson)

Little Bunting Emberiza pusilla Common Hangetham

Crested Bunting Melophus lathami 1 Ilam-Jamuna

# Additional species from my notes ( J. Curson )

Little Comovant (Halietar niger)

Internediate Egret (Egretla internedia)

Black Ibis (Pseudibis papillosa)

(Mared Dove (Streptopelia decarcto)

Ring-neihed Paraheet (Psittacula kranen)

Hindayan Golden-backed Woodpecker (Dinguin shoni)

Common Smift (April aprils)

Strated Laughing Thresh (Gamulax stratus)

Magpie Robin (Copsychus saularis)

Dusky Warbler (Phyllosopus fuscatus)

I rea Surischare

Several Chisapani Bridge

10 near Bitamond

2 Sukhani

Common in Lower Mai

2 Sukhari

10 + Sukhani

Fairly comman Hango Than

3 Lodia, 1 Sukhari

1 Sukhari

Notes on the Meghauli and Tiger Tops areas of Chitwan National Park, Nepal.

6 - 8 April 1989

#### Introduction

Meghauli is just outside the Park but it is possible to get a boat across the river and then walk through the grassland and Acacia scrub to the dry sal forest of the Tiger Tops area. At present there is one lodge in Meghauli. It has two rooms and, at 40 rupees a room it is much cheaper than Tiger Tops.

Meghauli is completely cultivated. There is a grass airstrip serving Tiger Tops just outside the village. The surrounding land consists of arable land, orchards and some pasture. Across the river in the Park there are three main habitats:-dry grassland (mostly elephant grass) and Acacia scrub in the area adjoining the river and dry sal forest around Tiger Tops itself.

## State of the forest and grassland

The dry sal forest is in quite good condition with a 40% or more crown cover and a reasonable understorey. There is some evidence of cutting and damage to the understorey, however, The grassland areas appear to be virtually undisturbed.

#### Threats

The Park is protected but cutting of the trees and understorey still occurs. According to one of the Park wardens there is an annual 'free for all' in the winter when people can come in and collect dead wood. Apparantly, plenty of live wood also disappears at this time. The employees of Tiger Tops live in nearby villages and apparantly use local wood for cooking. In addition, there are 900 Park Police stationed in the park who use local wood for cooking. This must put some pressure on the forest. Thus there is some ongoing damage to the forest but there is no evidence that this is changing the proportions of the habitats at present. There are no threats to the grasslands at present:- good news for Bengal Floricans.

## Significant bird species

A Bengal Florican was seen in display flight in the grassland area. This species is considered threatened by T.C.B.P.

# Suggestions for further study

The fauna of the park is comparitively well known but species lists from visiting birders would still be useful.

Annotated Species List for the Meghauli and Tiger Tops areas of Chitwan National Park. Nepal.

6 - 8 April 1989

Little Grebe (Tachybaptus ruficollis)
1 seen.

Great Cormorant (Phalocrocorax carbo) 3 seen.

Little Egret (Egretta garzetta) 25 seen.

Cattle Egret (Bubulcus ibis) 5 seen.

Indian Pond Heron (Ardeola grayii) 15 seen.

Openbill Stork (Anastomus oscitans) 25 seen.

White-necked Stork (Ciconia episcopus) 1 seen.

Lesser Adjutant (Leptoptilos javanicus) 1 seem.

Black This (Pseudibis papollosa) 3 seen.

Lesser Whistling Duck (Dendrocygna javanica) c. 100 seen.

Ruddy Shelduck (Tadorna ferruginea) c. 50 seen.

Pintail (Anas acuta) 10 seen.

Black Kite (Milvus migrans) 2 seen.

Shikra (Accipiter badius) 2 seen.

Oriental Honey Buzzard (Pernis ptilorhyncus) 2 seen.

Griffon Vulture (Gyps fulvus) 3 seen.

Long-billed Vulture (G. indicus) 5 seen.

Indian White-backed Vulture (G. bengalensis) 3 seen.

Crested Serpent Eagle (Spilormis cheela) 1 seen.

Osprey (Pandion haliaetus) 2 seen.

Black Partridge (Francolinus francolinus) Fairly common.

Red Jungle Fowl (Gallus gallus) Fairly common.

Common Peafowl (Pavo cristatus) Fairly common.

Bengal Florican (Houbaropsis bengalensis) 1 male seen.

Red-wattled Lapwing (Vanellus indicus) 4 seen.

River Plover (V. duvaucelii) 2 seen.

Little Ringed Plover (Charadrius dubius) 1 seen.

Redshank (Tringa totanus)

1 seen.

Greenshank (T. nebularia) 6 seen.

Green Sandpiper (T. ochropus)
1 seen.

Common Sandpiper (Actitis hypoleucos) 5 seen.

Temminck's Stint (Calidris temminckii) 2 seen.

Great Black-headed Gull (Larus ichthyaetus) 1 seen.

Orange-breasted Green Pigeon (Treron bicincta) 1 seen.

Collared Dove (Streptopelia decaocto)

Rufous Turtle Dove (S. orientalis) 3 seen.

Spotted Dove (S. chinensis) Common.

Alexandrine Parakeet (Psittacula eupatria) Fairly common.

Rose-ringed Parakeet (P. krameri) Fairly common.

Common Hawk Cuckoo (Cuculus varius) 2 heard.

Eurasian Cuckoo (C. canorus) 2 heard.

Spotted Owlet (Athene brama) 2 seen.

Common Indian Nightjar (Caprimulgus asiaticus)

l seen.

Lesser Pied Kingfisher (Ceryle rudis) 1 seen.

Common Kingfisher (Alcedo atthis) 1 seen.

White-breasted Kingfisher (Halycon smyrnensis) 2 seen.

Chestnut-headed Bee Eater (Merops leschemaulti)

1 seen.

Little Green Bee Eater (M. orientalis)

Hoopoe (Upupa epops)
1 seen.

Indian Pied Hornbill (Anthracoceros malabaricus) 2 seen.

Coppersmith (Megalaima haemacephala)

1 seen.

Fulvous-breasted Pied Woodpecker (Picoides macei) 2 seem.

Bush Lark (Mirafra assamica) Fairly common.

Sand Lark (Calandrella raytal) 4 seen.

Brown-throated or Plain Sand Martin (Riparia paludicola) Common.

Swallow (Hirundo rustica) Fairly common.

Rufous-backed Shrike (Lanius schach tricolor) - Black-headed race 5 seen.

Golden Oriole (Oriolus oriolus)
1 seen.

Black-headed Oriole (O. xanthornus) 2 seen.

Black Drongo (Dicrurus macrocercus) Common.

Spangled Dromgo (D. hottentottus)
1 seen.

Grey-headed Myna (Sturnus malabaricus) Fairly common.

Common Myna (Acridotheres tristis)

Jungle Myna (A. fuscus)

Jungle Crow (Corvus macrorhynchos)

Common Iora (Argithinia tiphia) 4 seen.

Red-whiskered Bulbul (Pycnonotus jocosus) Fairly common.

Red-vented Bulbul (P. cafer) Fairly common.

Black Bulbul (Hypsipetes madagascariensis) Common.

Spotted Babbler (Pellorneum ruficeps) 2 seen.

Red-capped Babbler (Timalia pileata) Fairly common.

Slender-billed Babbler (Turdoides longirostris) 4 seen.

Striated Babbler (T. earlei) Fairly common.

Rufous-necked Laughing Thrush (Garrulax ruficollis) 2 seen.

White-throated Fantail (Rhipidura albicollis) 1 seen.

Fan-tailed Warbler (Cisticola juncidis) Common.

Red-headed Fantail (C. exilis)
1 seen.

Large Grass Warbler (Graminicola bengalensis) 1 seen.

Indian Prinia (Prinia subflava) 2 seen.

Yellow-bellied Prinia (P. flaviventris) Fairly common.

Hodgson's Prinia (P. cinereocapilla) 4 seen.

Tailorbird (Orthotomus sutorius)
1 seen.

Yellow-browed Warbler (Phylloscopus inornatus) 5 seen.

Large-billed Warbler (P. magnirostris)

1 seen.

Bluethroat (Erithacus svecicus) 2 seen.

Himalayan Rubythroat (E. pectoralis) 2 seen.

Magpie Robin (Copsychus saularis)

Shama (C. malabaricus) 5 seen.

Black Redstart (Phoenicurus ochrurus) 2 seen.

Stonechat (Saxicola torquata) Fairly common.

White-tailed Stonechat (S. leucura) Fairly common, at least 12 seen.

Pied Bush Chat (S. caprata) 4 seen.

Black-throated Thrush (Turdus ruficollis strogularis) 1 seen.

Grey Tit (Parus major) 2 seen.

Velvet-fronted Nuthatch (Sitta frontalis) 6 seen.

Chestnut-bellied Nuthatch (S. castanea) 2 seen.

Paddyfield Pipit (Anthus novaeseelandiae) Fairly common.

Olive-backed Pipit (A. hodgsomi) Fairly common.

Rosy Pipit (A. roseatus)
4 seen.

Citrine Wagtail (Motacilla citreola) 2 seen.

Yellow Wagtail (M. flava) l seen - thumbergi race.

White Wagtail (M. alba) 6 seen.

Large Pied Wagtail (M. maderaspatensis) 2 seen.

House Sparrow (Passer domesticus)

White-throated Munia or Indian Silverbill (Lonchura malabarica) Fairly common.

Common Rosefinch (Carpodacus erythrinus) Fairly common.