

were Black-crowned Night-Herons, Grey *Ardea cinerea* and Purple *A. purpurea* Herons. We do not know if Asian Openbill-Storks also use this tank because our visit was far beyond their nesting season. We spotted a single Asian Openbill-Stork on this lake but could not see any nesting activity. However, given the crowded conditions of Uppalapadu heronry, it is quite possible that all the breeding species are spreading to the surrounding tanks.

The A.P. Forest Department has taken up this pelicanry as a designated protected area and has introduced watch and ward staff in the area. Furthermore, the village council is also keenly interested in the area and is taking interest in the protection and conservation of the tank and the birds. However, the problem of over crowding and encroachment on this tank remains and urgent measures are needed to enable the pelicanry at Uppalapadu to survive. Otherwise this very successful pelicanry will also disappear, as did the one at Kolleru in the 1970s.

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Bibliography

- BirdLife International. 2001. *Threatened Birds of Asia: The BirdLife International Red Data Book*. 2 vols. Collar, N. J., Andreev, A. V., Chan, S., Crosby, M. J., Subramanya, S. & Tobias, J. A. (eds.). Cambridge, UK: BirdLife International.
- Gee, E. P. 1960. Breeding of the Grey or Spot-billed Pelican *Pelicanus philippensis* (Gmelin). *J. Bombay Nat. Hist. Soc.* 57: 245–251.
- Guttikar, S. N. 1979. Lost pelicanry. *J. Bombay Nat. Hist. Soc.* 75: 482–484.
- Islam, M. Z. & Rahmani, A. R. 2004. *Important Bird Areas in India: Priority sites for conservation*. Indian Bird Conservation Network: Bombay Natural History Society & BirdLife International (UK).
- Nagulu, V. & Rao, J. V. R. 1983. Survey of south Indian pelicanries. *J. Bombay Nat. Hist. Soc.* 80: 141–143.
- Neginhal, S. G. 1977. Discovery of pelicanry in Karnataka. *J. Bombay Nat. Hist. Soc.* 74: 169–170.
- Rao, K. M. & Kumar K. R. 2000. Arrival of Spotbilled Pelicans at Uppalapadu. *Newsletter for Birdwatchers* 40 (1): 14.
- Taher, H. 2006. Of pelicans and painted storks – BSAP camp to Uppalapadu pelicanry. 9th April 2006. *Pitta* 3 (5): 2–3.

Winter birds of Kakoijana (Proposed) Wildlife Sanctuary, Assam, India

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Introduction

The Kakoijana (Proposed) Wildlife Sanctuary (KPWLS) (26°22'N–20°21'N 90°33'E–90°34'E) is located in the Bongaigaon district of western Assam, India. The area is home to the highly endangered golden langur *Trachypithecus geei* and the sanctuary was proposed in order to protect the population of this primate. Kakoijana falls under the Assam Plains endemic bird area although it has not been listed as an Important Bird Area (IBA) of the state (Islam & Rahmani 2004).

In this paper we discuss the ornithological significance and species diversity of Kakoijana, based on a six-month fieldwork on a project assessing the wintering bird community and non-breeding habitat utilization by the Dicruridae of KPWLS. However, here we discuss the significance of Kakoijana in terms of avifaunal conservation as well as some interesting observations in a degraded forest.

Although some work has been done to document the birds of this region (Arnab Bose *verbally*; Singha & Borah 2001) the lack of a comprehensive checklist is quite evident. Here we present the first detailed systematic account of the avian diversity of KPWLS recorded during a four-month period from early January 2005 to late April 2005.

Study area

Kakoijana covers 1,700.24 ha and falls under the Aie Valley Division, Bongaigaon, Assam (Fig. 1). It was originally managed by *zamindars* (landlords) and was constituted into a Reserved Forest by the Forest Department in 1966. In April 1999 a proposal to upgrade it to a Wildlife Sanctuary was made, largely to protect its golden langur population. This is the key species of KPWLS and all current management inputs are directed towards its conservation.

The terrain of KPWLS is hilly, with the altitude ranging from about 59 m above m.s.l. (near Hapasara beat office) to the highest of 160 m above m.s.l. at the western hilltop. The hills run in all directions with moderate to deep slopes in between. The physiography is intersected by one perennial stream locally known as “Kalikapat”, which flows north–south. The soil of the KPWLS is red loamy and favours the growth of important timber yielding trees such as Sal *Shorea robusta* and Teak *Tectona grandis*.

KPWLS comprises mostly of mixed moist deciduous forest (Singha & Borah 2001). These natural forests comprise of deciduous species of trees such as *Shorea*, *Dalbergia*, *Caesalpinia*, *Vatica*, *Toona*, *Albizia*, etc. Scattered bamboo groves comprising *Dendrocalamus*, *Bambusa*, etc., occur in the hill slopes and along few perennial hollows. Some semi-

evergreen patches composed of *Caryota urens*, *Calamus*, *Streblus asper*, etc., appear along the Kalikapat stream, largely due to edaphic conditions. The shrubs that appear in degraded patches include species of *Glycosmis*, *Cassia*, *Melastoma*, *Clerodendrum* and *Lantana*. Besides natural forest, there are large patches of Teak monoculture along the eastern sides of the hills.

Cultivated lands and human habitation are found all around the forest, and the present degraded condition of the forest is primarily because of heavy anthropogenic pressure.

The climate of KPWLS is 'subtropical with pronounced monsoon' with three distinct seasons namely, winter, summer and monsoon. The annual rainfall ranges from 2,500 mm to 3,500 mm, and the temperature ranges from 13°C in December–January to 32°C in May–June (National Information Center, Bongaigaon).

Methods

We conducted regular weekly surveys following the 'fixed width line transects method' (Javed & Kaul 2002), during the peak wintering period. We studied the bird community in four different habitats, namely: forest edge, evergreen patch along a stream, logged forest patch and, teak monoculture. Four transects of roughly 1 km length were laid, one each in the above mentioned habitats, except that of the stream habitat which was 700 m long. In most community studies, a transect length up to 800 m is adequate (Javed & Kaul 2002). The forest edge separates the two communities of teak monoculture and a wet paddy field. The teak monoculture (<30 cm DBH) was covered intermittently with bushes and herbs varying in height. The evergreen patch along the stream includes tree species of *Garcinia*, *Syzigium*, *Ficus*, *Macaranga*, *Lea asiatica*, *Callicarpa arborea* and dense undergrowth of shrubs, saplings, weeds, ferns, some grasses and herbaceous plants. The logged forest was a completely logged patch and had very few large trees. *Litsea* sp., *Bixa orellana* and teak saplings were common as was bamboo.

We studied birds within 20 m of both sides of the transect, to keep uniform width i.e., 40 m in all the transects. Though visibility was good in the case of the logged and edge transects, and to some extent in the monoculture transect, thick vegetation along the stream transect made it difficult to observe birds there.

Besides these four transects, bird observations were also made during different times of the day in various locations of the study area so as to detect those species that might have been missed in the transects. Birds were observed using direct sighting technique with the help of 8x40 binoculars and identified according to a standard field guide (Grimmett et al. 1999). In certain cases birds were identified from their call when sighting was not possible. Classification, common name and scientific names follow Manakadan & Pittie (2001).

Based on the number of sight records, the abundance of a given species was assigned as 'common' (seen daily), 'uncommon' (encountered occasionally, five or less than five times) and, 'rare' (encountered once or twice).

Results & discussion

A total of 117 species belonging to 35 Families and 13 Orders

were recorded in Kakoijana (Appendix 1). These included 114 species seen during the study period, and additional three species (Pied Harrier *Circus melanoleucos*, Black-shouldered Kite *Elanus caeruleus*, and Oriental Pied Hornbill *Anthraceros albirostris*) from earlier records (Singha & Borah 2001; H. Singha).

Of these 52% (61 spp.) are common, 29% (34 spp.) are uncommon and 16% (19 spp.) are rare and three species were sighted by HS. Of these, 67 spp. (57.26%) are resident, 19 (16.23%) are winter visitors and one (0.9%), the Burmese Shrike *Lanius colluriooides*, a passage migrant.

There were three species common to all the four transects: Red-vented Bulbul *Pycnonotus cafer*, Jungle Babbler *Turdoides striatus* and Common Tailorbird *Orthotomus sutorius*. Four species were found in three habitats: Grey-backed Shrike *Lanius tephronotus* (stream, edge and logged habitat), Oriental Magpie-Robin *Copsychus saularis* (edge, logged and monoculture), Thick-billed Warbler *Acrocephalus aedon* (stream, edge and monoculture) and Spotted Dove *Streptopelia chinensis* (stream, edge and monoculture).

The critically endangered Indian White-backed Vulture *Gyps bengalensis* was seen only once (31.iii.2005) in a flock of five soaring individuals. Lesser Adjutant Stork *Leptoptilos javanicus*, a vulnerable as well as globally threatened and restricted range species (Islam & Rahmani 2004) was also sighted once (31.iii.2005) in Kakoijana. Two individuals of the species were found foraging at the edge of the reserve near a paddy field.

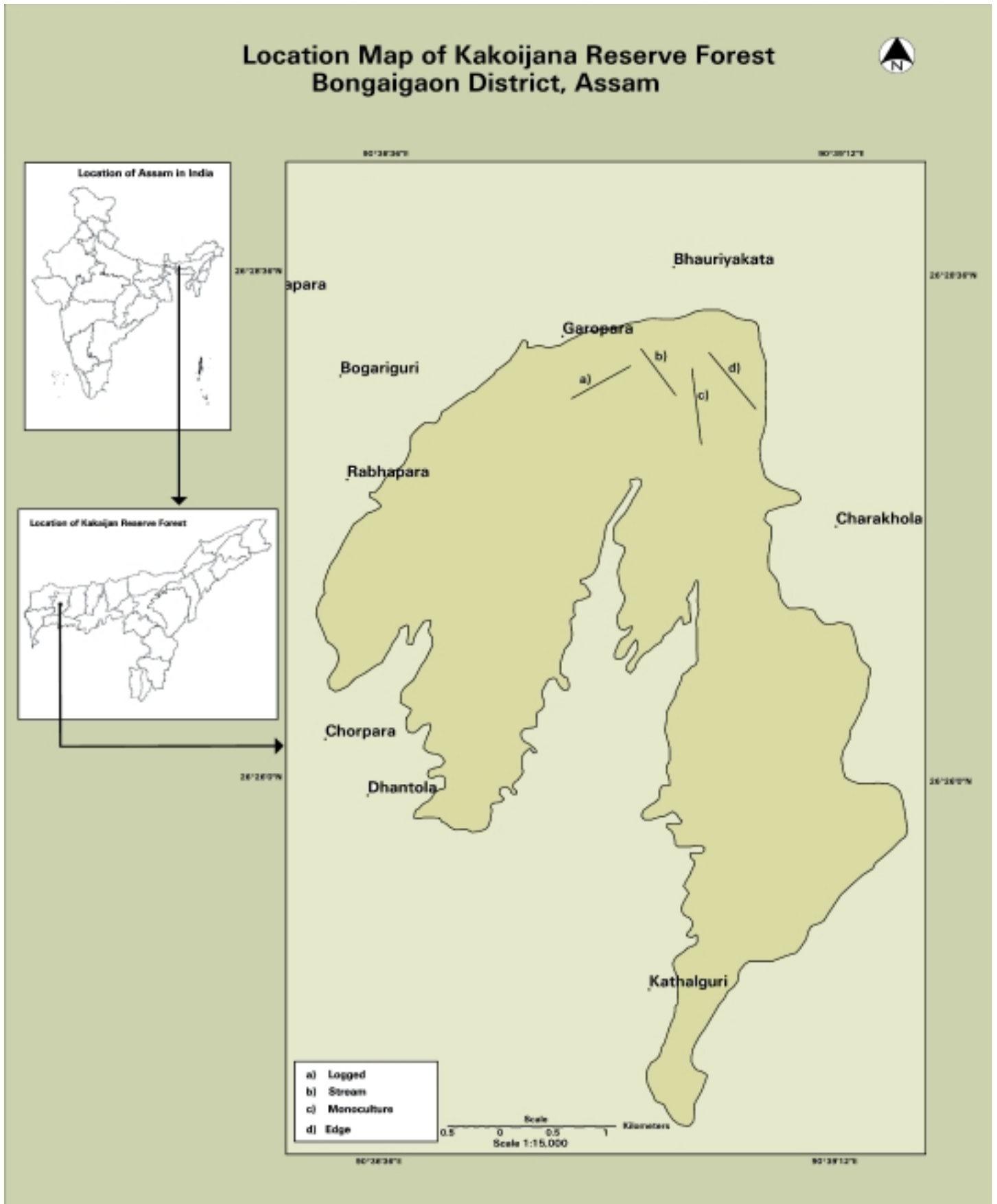
The vulnerable Hodgson's Bushchat *Saxicola insignis* was sighted once (22.i.2005) during the study. We found it perching on *Eupatorium* herb on the "edge transect." We identified the male on the basis of non-breeding plumage having a white throat. We could separate it from the confusingly similar male Common Stonechat *S. torquata* by its white throat and more white on its wing.

We spotted a male White-tailed Stonechat *S. leucura* on 22.i.2005 foraging in some shrubs in the edge transect. It had white inner webs to the tail feathers, which differentiated it from Common Stonechat. Although these three are obligate grassland species, we found them at the edge of the KPWLS. It could be mentioned that River Aie, one of the major tributaries of River Brahmaputra, flows on the eastern side of KPWLS. The distance from the river to the Reserve is about 500 m. On both banks of the river, patches of riverine grassland (*Saccharum munja*, *S. spontaneum*) occur. The birds might have flown from there for some unknown reasons. According to Choudhury (2000), the Hodgson's Bushchat is a vagrant winter visitor, while the other two are common.

The interesting and uncommon passage migrant, Burmese Shrike *Lanius colluriooides* (Choudhury 2000) was sighted on 31.i.2005 in the "edge transect", perched on the leafless branch of a teak tree. It's under parts were completely white, while on top it was deep chestnut. Later we matched the detail of the bird with Ali & Ripley (1987), and confirmed its identification.

Forest Eagle Owl *Bubo nipalensis* was sighted thrice: once on 25.ii.2005 and twice on 28.ii.2005. Despite the three sightings, we presume that this was one bird, as it was seen on all the occasions in the same riparian habitat. As it is a resident of dense forest (Grimmett et al. 1999), its presence signifies the importance of KPWLS.

Fig. 1. Map of the Kakoijana (Proposed) Wildlife Sanctuary showing the locations of the transects.



A Blue-fronted Robin *Cinclidium frontale* was spotted on 7.iii.2005 in the edge habitat, foraging in shrubby undergrowth. Choudhury (2000) does not give its status; however he sighted this species in Nagaland (A. Choudhury verbally).

A Common Chiffchaff *Phylloscopus collybita* was sighted on 25.ii.2005 foraging under shrubs. It was observed for about 15–20 minutes.

We saw a Peregrine Falcon *Falco peregrinus* (migratory race *calidus*?) on 30.iii.2005, flying above the stream habitat and then perching on a treetop.

A Longtailed Nightjar *Caprimulgus macrurus* was identified by its “*chaunk-chaunk-chaunk*” call. Of course it was outside the studied transect. Similarly, feral (?) Blue Rock Pigeon *Columba livia* were also sighted outside the transects.

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References

- Ali, S. & Ripley, S. D. 1987. *Compact handbook of the birds of India and Pakistan together with those of Bangladesh, Nepal, Bhutan and Sri Lanka*. 2nd ed. Delhi: Oxford University Press.
- Choudhury, A. 2000. *The birds of Assam*. Guwahati: Gibbon Books & WWF-India.
- Grimmett, R., Inskipp, C. & Inskipp, T. 1999. *Pocket guide to the birds of the Indian subcontinent*. New Delhi: Oxford University Press.
- Islam, M. Z. & Rahmani, A. R. 2004. *Important Bird Areas in India: Priority Sites for Conservation*. Mumbai: Indian Bird Conservation Network: Bombay Natural History Society & BirdLife International (UK).
- Javed, S. & Kaul, R. 2002. *Field methods for bird survey*. New Delhi: Bombay Natural History Society, Department of Wildlife science, Aligarh Muslim University, Aligarh, and World Pheasant Association, South Asia Regional Office (SARO).
- Manakadan, R. & Pittie, A. 2001. Standardised common and scientific names of the birds of the Indian Subcontinent. *Buceros* 6 (1): i–ix, 1–37.
- Singha, H. & Borah, A. 2001. Pilot survey of late winter vegetation in Kakojana (Proposed) Wildlife Sanctuary. Bongaigaon: Birjhora Mahavidyalaya.

Appendix 1. Checklist of birds found in Kakojana (Proposed) Wildlife Sanctuary during January through April 2005. The species mentioned as residents in the Appendix 1 are recorded after Choudhury (2000), are strictly implied to be resident in Assam and has nothing to do with the low altitude range of KPWLS.

Family & species	Abundance	Status in Assam	Habitat
Phalacrocoracidae			
Little Cormorant <i>Phalacrocorax niger</i>	c	R, C	OT
Ardeidae			
Little Heron <i>Butorides striatus</i>	un	R, C	S
Indian Pond Heron <i>Ardeola grayii</i>	c	R, C	E
Chestnut Bittern <i>Ixobrychus cinnamomeus</i>	r	R, C	E
Cattle Egret <i>Bubulcus ibis</i>	c	R, C	E
Great Egret <i>Casmerodius albus</i>	un	R, C	OT
Intermediate Egret <i>Mesophoyx intermedia</i>	c	R, C	E
Little Egret <i>Egretta garzetta</i>	c	R, C	E
Ciconiidae			
Asian Open-bill Stork <i>Anastomus oscitans</i>	un	R, C	E
Lesser Adjutant Stork <i>Leptoptilos javanicus</i>	r	R, C	OT
Accipitridae			
Oriental Honey-Buzzard <i>Pernis ptilorhynchus</i>	un	R, L	OT
Black Kite <i>Milvus migrans</i>	c	R	OT
Black-shouldered Kite <i>Elanus caeruleus</i>	HS	R, U	-
Indian White-backed Vulture <i>Gyps bengalensis</i>	r	R, C	OT
Crested Serpent-Eagle <i>Spilornis cheela</i>	c	R, C	OT
Pied Harrier <i>Circus melanoleucos</i>	HS	M, W, C	-
Black Eagle <i>Ictinaetus malayensis</i>	r	R, U	OT
Shikra <i>Accipiter badius</i>	c	R, C	E

Family & species	Abundance	Status in Assam	Habitat
Common Buzzard <i>Buteo buteo</i>	r	W, U	OT
Falconidae			
Common Kestrel <i>Falco tinnunculus</i>	c	W, C	OT
Peregrine Falcon <i>Falco peregrinus</i>	r	W	S
Phasianidae			
Red Junglefowl <i>Gallus gallus</i>	c	R, C	OT
Charadriidae			
Red-wattled Lapwing <i>Vanellus indicus</i>	un	R, C	E
Scolopacidae			
Green Sandpiper <i>Tringa ochropus</i>	un	W, C	E
Columbidae			
Blue Rock Pigeon <i>Columba livia</i>	c	R, C	OT
Yellow-legged Green Pigeon <i>Treron phoenicoptera</i>	c	R, C	OT
Green Imperial-Pigeon <i>Ducula aenea</i>	un	R, C	OT
Oriental Turtle-Dove <i>Streptopelia orientalis</i>	un	R, C	S
Spotted Dove <i>Streptopelia chinensis</i>	c	R, C	S, E, M
Eurasian Collard-Dove <i>Streptopelia decaocto</i>	c	R, C	S
Cuculidae			
Asian Koel <i>Eudynamys scolopacea</i>	c	R, L, C	OT
Large Green-billed Malkoha <i>Phaenicophaeus tristis</i>	un	R, C	S,L
Greater Coucal <i>Centropus sinensis</i>	c	R, C	L
Lesser Coucal <i>Centropus bengalensis</i>	r	R, C	OT
Tytonidae			
Barn Owl <i>Tyto alba</i>	c	R, C	OT
Strigidae			
Asian Barred Owlet <i>Glaucidium cuculoides</i>	c	R, L, C	OT
Forest Eagle-Owl <i>Bubo nipalensis</i>	un	R, U	OT
Caprimulgidae			
Longtailed Nightjar <i>Caprimulgus macrurus</i>	un	R, L, C	OT
Apodidae			
Asian Palm-Swift <i>Cypsiurus balasiensis</i>	c	R	OT
House Swift <i>Apus affinis</i>	c	R, L, C	OT
Alcedinidae			
Small Blue Kingfisher <i>Alcedo atthis</i>	c	R, C	S
White-breasted Kingfisher <i>Halcyon smyrnensis</i>	c	R, C	E
Coraciidae			
Indian Roller <i>Coracias benghalensis</i>	c	R, L, C	OT
Bucerotidae			
Oriental Pied Hornbill <i>Anthracoceros albirostris</i>	HS	R, C	-
Capitonidae			
Coppersmith Barbet <i>Megalaima haemacephala</i>	c	R, C	OT
Blue-throated Barbet <i>Megalaima asiatica</i>	c	R, C	OT

Family & species	Abundance	Status in Assam	Habitat
Picidae			
Fulvous-breasted Pied Woodpecker <i>Dendrocopos macei</i>	un	R, C	OT
Lesser Golden-backed Woodpecker <i>Dinopium benghalense</i>	c	R, C	OT
Greater Golden-backed Woodpecker <i>Chrysocolaptes lucidus</i>	un	R, C	OT
Hirundinidae			
Red-rumped Swallow <i>Hirundo daurica</i>	un	R, W	OT
Motacillidae			
White Wagtail <i>Motacilla alba</i>	c	W, C	E
Citrine Wagtail <i>Motacilla citreola</i>	c	W, C	E
Grey Wagtail <i>Motacilla cinerea</i>	c	W, C	S
Paddyfield Pipit <i>Anthus rufulus</i>	c	R, C	E
Oriental Tree Pipit <i>Anthus hodgsoni</i>	r	W, C	OT
Campephagidae			
Large Cuckoo-Shrike <i>Coracina macei</i>	un	R, C	OT
Large Woodshrike <i>Tephrodornis gularis</i>	un	R, C	OT
Common Woodshrike <i>Tephrodornis pondicerianus</i>	un	R, C	OT
Pycnonotidae			
Black-crested Bulbul <i>Pycnonotus melanicterus</i>	c	R, C	S
Red-vented Bulbul <i>Pycnonotus cafer</i>	c	R, C	S, E, L, M
Black Bulbul <i>Hypsipetes leucocephalus</i>	un	R, L, C	OT
Irenidae			
Common Iora <i>Aegithina tiphia</i>	c	R, C	S
Gold-fronted Chloropsis <i>Chloropsis aurifrons</i>	c	R, C	OT
Laniidae			
Brown Shrike <i>Lanius cristatus</i>	r	W, C	S
Burmese Shrike <i>Lanius colluriooides</i>	r	R, L, P, U	E
Rufous-backed Shrike <i>Lanius schach</i>	r	W, R, C	E, M
Grey-backed Shrike <i>Lanius tephronotus</i>	c	W, C	S, E, L
Muscicapidae			
Blue Whistling-Thrush <i>Myophonus caeruleus</i>	c	R, L, C	S, E
Grey-winged Blackbird <i>Turdus boulboul</i>	un	R, W, C	OT
Siberian Rubythroat <i>Luscinia calliope</i>	r	W, U	S
Oriental Magpie-Robin <i>Copsychus saularis</i>	c	R, C	E, L, M
White-tailed Robin <i>Myiomela leucura</i>	un	R, W, C	OT
Blue-fronted Robin <i>Cinclidium frontale</i>	r	?	E
White-rumped Shama <i>Copsychus malabaricus</i>	c	R, C	OT
White-capped Redstart <i>Chaimarrornis leucocephalus</i>	c	R, W, C	S
Plumbeous Redstart <i>Rhyacornis fuliginosus</i>	c	R, W, C	S
Grey Bushchat <i>Saxicola ferrea</i>	r	R, L, C	L
White-tailed Stonechat <i>Saxicola leucura</i>	un	R, L, C	E
Common Stonechat <i>Saxicola torquata</i>	c	W, R, C	E
Hodgson's Bushchat <i>Saxicola insignis</i>	r	W, S	E

Family & species	Abundance	Status in Assam	Habitat
Spot-throated Blabber <i>Pellorneum albiventre</i>	un	R, L, C	S
Jungle Babbler <i>Turdoides striatus</i>	c	R, C	S, E, L, M
Blyth's Reed Warbler <i>Acrocephalus dumetorum</i>	un	W, C	OT
Greenish Leaf-Warbler <i>Phylloscopus trochiloides</i>	r	R, W, C	S, L
Eastern Crowned Warbler <i>Phylloscopus coronatus</i>	r	W	L
Thick-billed Warbler <i>Acrocephalus aedon</i>	un	W	S, E, M
Blyth's Leaf Warbler <i>Phylloscopus reguloides</i>	un	W, R	S
White-spectacled Flycatcher-Warbler <i>Seicercus affinis</i>	un	R, L	S
Common Tailorbird <i>Orthotomus sutorius</i>	c	R, C	S, E, L, M
Red-throated Flycatcher <i>Ficedula parva</i>	un	W, C	M
Little Pied Flycatcher <i>Ficedula westermanni</i>	un	L, C	OT
Slaty-blue Flycatcher <i>Ficedula tricolor</i>	un	R, W, L, C	S
Verditer Flycatcher <i>Eumyias thalassina</i>	c	W, C	S
Small Niltava <i>Niltava macgrigoriae</i>	un	R, L, C	S
Rufous-bellied Niltava <i>Niltava sundara</i>	un	R, L, C	OT
Grey-headed Flycatcher <i>Culicicapa ceylonensis</i>	c	R, W, C	S
Black-naped Monarch-Flycatcher <i>Hypothymis azurea</i>	un	R, L, C	OT
Common Chiffchaff <i>Phylloscopus collybita</i>	r	W, ?	OT
Paridae			
Great Tit <i>Parus major</i>	c	R, C	OT
Dicaeidae			
Scarlet-backed Flowerpecker <i>Dicaeum cruentatum</i>	un	R, C	OT
Nectariniidae			
Crimson Sunbird <i>Aethopyga siparaja</i>	c	R, L, C	S, M
Little Spiderhunter <i>Arachnothera longirostra</i>	r	R, C	E
Zosteropidae			
Oriental White-eye <i>Zosterops palpebrosus</i>	c	R, C	S
Estrildidae			
White-rumped Munia <i>Lonchura striata</i>	un	R, C	S
Sturnidae			
Grey-headed Starling <i>Sturnus malabaricus</i>	c	R, C	OT
Asian Pied Starling <i>Sturnus contra</i>	c	R, C	OT
Common Myna <i>Acridotheres tristis</i>	c	R, C	OT
Jungle Myna <i>Acridotheres fuscus</i>	c	R, C	OT
Oriolidae			
Black-headed Oriole <i>Oriolus xanthornus</i>	c	R, C	E
Dicruridae			
Black Drongo <i>Dicrurus macrocercus</i>	c	R, C	S, E
Greater Racket-tailed Drongo <i>Dicrurus paradiseus</i>	c	R, C	S
Bronzed Drongo <i>Dicrurus aeneus</i>	c	R, C	OT
Spangled Drongo <i>Dicrurus hottentottus</i>	c	R, C	OT
Artamidae			

Family & species	Abundance	Status in Assam	Habitat
Ashy Woodswallow <i>Artamus fuscus</i>	c	R, C	OT
Corvidae			
House Crow <i>Corvus splendens</i>	c	R, C	OT
Jungle Crow <i>Corvus macrorhynchos</i>	c	R, C	OT
Indian Treepie <i>Dendrocitta vagabunda</i>	c	R, C	E
Abundance:		R=Resident	
c=common (daily encounter)		S=Stray or vagrant	
HS=H. Singha		U=Uncommon	
r=rare (encountered once or twice)		W=Winter visitor	
un=uncommon (encountered occasionally, five or less than five times)			
Status in Assam (Choudhury 2000):		Habitat:	
C=Common		E = Edge	
L=Local and altitudinal migrant		L = Logged	
M=migrant, but some breed here		M = Monoculture	
P=Passage migrant		OT = Outside transects	
		S = Stream	

The Crested Tit-warbler *Leptopoeile elegans* in north-west Arunachal Pradesh. An addition to the Indian avifauna

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The Crested Tit-warbler *Leptopoeile elegans* is a globally Near-threatened species (Collar et al. 1994). It is distributed through northern central China and Tibet from central Gansu and Qinghai (namely Nan Shan and Qinghai Hu region south to southern Gansu), north-western Sichuan to Sungpan, and to central Sikang, China, westwards to the China border. It inhabits coniferous mountain forest and scrub (mostly spruce and also dwarf alpine juniper and birch) from above the tree line to 4,300 m. In winter it descends to mountain valleys in the sub-alpine forest zone between 2,800 and 3,900 m when it forms small flocks and mixes with other species (Baker 1997; MacKinnon & Phillipps 2000).

Several authors have speculated about the species' presence in Arunachal Pradesh (Ali & Ripley 1997; Baker 1997; Kazmierczak 2000; Rasmussen & Anderton 2005). Being resident in the Tsangpo bend area of south-eastern Tibet, Ali & Ripley (1997) presumed that the species could occur south of the bend along the McMahon Line (the international boundary between India and China), where in fact the habitat is tropical (such as at Gelling), and the elevation much lower, at several points, than the species prefers. Two of us (HSS and RN) surveyed the area on two earlier visits: in February

2004 up to Mouling National Park and in December 2005 up to Gelling along the McMahon Line where the Brahmaputra (Siang) River enters India (Naoroji & Sangha 2006). The lower and middle altitudes along the Siang Valley are covered with tropical evergreen forests.

Bum La (4,331 m) and Gasella (c. 4,000 m) lie along the McMahon Line. We spent two days, 23.x.2006 and 27.x.2006, birding these desolate areas and were fortunate to record the Crested Tit-warbler *Leptopoeile elegans*—a first for the Indian Subcontinent.

It was 2°C in the sun at 14:15 hrs on 23.x.2006, and bird activity was low on the track going towards Gasella from Tawang. While we were checking the dwarf rhododendrons, the dominant vegetation in the snow covered area, a conspicuous bird was spotted atop a rhododendron. The bird was barely 3 m from HSS and MS and both of them got clear views of the bird for approximately 10-15 seconds when it flew to another rhododendron some distance away.

Recovering quickly from his initial excitement HSS confirmed that it was a male Crested Tit-warbler, the species being strongly dimorphic. Having studied the illustrations and distribution of the species in Vaurie (1972), Meyer de