

# Indian Birds

Vol. 2 No. 4

July-August 2006



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Salim Ali Centre for Ornithology and Natural History: Director, Anaikatty P.O., Coimbatore 641108, India. Website: [www.saconindia.org](http://www.saconindia.org). Email: [salimali@vsnl.com](mailto:salimali@vsnl.com)

Bird Watchers' Society of Andhra Pradesh: Honorary Secretary, P.O. Box 45, Banjara Hills, Hyderabad 500034, India. Website: [www.bsaponline.org](http://www.bsaponline.org). Email: [cbraoin@gmail.com](mailto:cbraoin@gmail.com) Publish: *Mayura*; *Pitta*.

Madras Naturalists' Society: Honorary Secretary, No. 8, Janaki Avenue, Abhirampuram, Chennai 600018, India. Website: [www.blackbuck.org](http://www.blackbuck.org). Email: [info@blackbuck.org](mailto:info@blackbuck.org). Publish: *Blackbuck*.

Institute of Bird Studies & Natural History: Director, Rishi Valley, Chittoor District, India 517352. Email: [birds@rishivalley.org](mailto:birds@rishivalley.org). Conduct: Home Study Course in Ornithology.

Oriental Bird Club: P.O. Box 324, Bedford, MK42 0WG, U.K. Website: [www.orientalbirdclub.org](http://www.orientalbirdclub.org). Publish: *Forktail*; *OBC Bulletin*.

Wetlands International-South Asia: A-25, 2nd Floor, Defence Colony, New Delhi 110024, India. Website: [www.wetlands.org](http://www.wetlands.org)

Wildlife Institute of India: Post Bag # 18, Chandrabani, Dehradun 248001, India. Website: [www.wii.gov.in](http://www.wii.gov.in).

Wildlife Trust of India: Wildlife Trust of India, A-220, New Friends Colony, New Delhi 110065, India. Website: [www.wti.org.in](http://www.wti.org.in).

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*Red Data Book*: [www.rdb.or.id/index.html](http://www.rdb.or.id/index.html)

*The Northern India Bird Network*: [www.delhibird.net](http://www.delhibird.net)

*Zoological Nomenclature Resource*: [www.zoonomen.net](http://www.zoonomen.net)

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*John Penhallurick's Bird Data Project*: [www.worldbirdinfo.net](http://www.worldbirdinfo.net)

*Saving Asia's threatened birds*:

[www.birdlife.net/action/science/species/asia\\_strategy/index.html](http://www.birdlife.net/action/science/species/asia_strategy/index.html)

*Wetlands International-South Asia*: [www.wetlands.org/articlemenu.aspx?id=8fb450de-f760-42bb-8337-c9942a41d5fc](http://www.wetlands.org/articlemenu.aspx?id=8fb450de-f760-42bb-8337-c9942a41d5fc)

*Optics*: [www.betterviewdesired.com](http://www.betterviewdesired.com)

## Library

Ali, Salim, 2002. *The book of Indian birds*. 13<sup>th</sup> revised edition. Mumbai: Bombay Natural History Society.

Ali, Salim & S. Dillon Ripley, 2001. *Handbook of the birds of India and Pakistan, together with those of Bangladesh, Nepal, Bhutan and Sri Lanka*. 10 vols. New Delhi: Oxford University Press.

Grimmett, Richard, Carol Inskipp and Tim Inskipp, 1998. *Birds of the Indian subcontinent*. London: Christopher Helm.

Harrison, John, 1999. *A field guide to the birds of Sri Lanka*. Oxford: Oxford University Press.

Inskipp, Carol & Tim Inskipp, 1985. *A guide to the birds of Nepal*. London: Croom Helm.

Inskipp, Carol, Tim Inskipp & Richard Grimmett, 1999. *Birds of Bhutan*. New Delhi: Oxford University Press.

Kazmierczak, Krysz, 2000. *A field guide to the birds of India, Sri Lanka, Pakistan, Nepal, Bhutan, Bangladesh and the Maldives*. New Delhi: Om Book Service.

Rasmussen, P.C. & Anderton, J.C. 2005. *Birds of South Asia. The Ripley Guide*. 2 vols. Washington D.C. & Barcelona: Smithsonian Institution & Lynx Edicions.

Roberts, T. J. 1991-92. *The birds of Pakistan*. 2 vols. Karachi: Oxford University Press.

Robson, Craig, 2000. *A field guide to the birds of South-East Asia*. London: New Holland.

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### Aims & Objectives

- To publish a newsletter that will provide a platform to birdwatchers for publishing notes and observations primarily on birds of South Asia.
- To promote awareness of bird watching amongst the general public.
- To establish and maintain links/liaison with other associations or organized bodies in India or abroad whose objectives are in keeping with the objectives of the Trust (i.e. to support amateur birdwatchers with cash / kind for projects in ornithology).



## Indian Birds

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**Front cover:** Bugun *Liocichla*—a stunning new babbler from Arunachal Pradesh [Photo: Ramana Athreya.]

# A new species of *Liocichla* (Aves: Timaliidae) from Eaglenest Wildlife Sanctuary, Arunachal Pradesh, India

Ramana Athreya

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This paper describes a new bird species of the genus *Liocichla* discovered near Eaglenest Wildlife Sanctuary in western Arunachal Pradesh, India. While the taxon most closely resembles *L. omeiensis*, an endemic of China, the many points of difference in plumage, size and vocalisations indicate a new species. The known population is very small and only three (breeding?) pairs responded to song playback in May 2006. The plumage and the vocalisations are distinctive and therefore the paucity of records suggests a small and highly localized population.

## 1. A new species of *liocichla*

### 1.1 The genus *Liocichla*

**L**iocichlas are an Asian babbler genus hitherto comprising three allopatric species. Red-faced *Liocichla* *Liocichla phoenicea* (Gould, 1837) [formerly Crimson-winged Laughingthrush *Garrulax phoeniceus*] is widely distributed from north-eastern India to north-western Vietnam through northern Myanmar, southern Yunnan (China), north-western Thailand and northern Laos (Ali & Ripley 1987; Dickinson 2003). Emei Shan *Liocichla* *Liocichla omeiensis* Riley, 1926 (also spelt Omei Shan) was for long thought to be confined to the Emei Shan Mountain in Sichuan (China) though recent observations have extended its range north-westward and southward (BirdLife International 2006). Steere's *Liocichla* *Liocichla steerii* Swinhoe, 1877 is endemic to Taiwan (Dickinson 2003). The genus was erected by Swinhoe (1877) while describing *L. steerii*, which he said was, "...in general characters a *Liiothrix* [sic], but with the stronger legs and shorter wings of a *Garrulax*..." Though not uncommon, *L. omeiensis* is classified as Vulnerable (BirdLife International 2001) because of its localized distribution and attractiveness to the bird trade. The other two species are not at risk.

### 1.2 Discovery of the Eaglenest taxon

On 12.i.1995, while birdwatching in Eaglenest Wildlife Sanctuary (27°02'–09'N 92°18'–35'E; 200–3,300 m), West Kameng district, Arunachal Pradesh, India, I had brief views of a pair of *liocichlas* which did not fit any description in Ali & Ripley (1987). My next sighting was of a flock on 3.i.2005 in the same locality. I saw them a second time on the same day and again on the next. From my field sketch Dhananjai Mohan identified the bird as *L. omeiensis* using MacKinnon & Phillips (2000), though it was not clear whether the bird was identical or merely very similar. The nearest record of *L. omeiensis* is over 1,000 km from Eaglenest. Pratap Singh, Dhananjai Mohan and I obtained mist-netting permits from the Forest Department, but failed to see the birds during two spells of observation, 23–28.i.2005 and 5–10.v.2005. I renewed my efforts on 21.v.2006 and finally netted a bird on 25.v.2006,

releasing it in the same area on the same day after obtaining photographs and detailed notes on its plumage. The similarities between the Eaglenest taxon and *L. omeiensis* suggest that they are closely related, but the many differences in plumage and vocalisations—especially song—indicate a new species and therefore I propose to name it:

### Bugun *Liocichla* *Liocichla bugunorum* sp. nov.

## 2. Description of the new species

### 2.1 Holotype and associated material

The holotype is the bird from which a few feathers were obtained and which is the subject in a series of photographs presented in this paper. The holotype was captured, photographed, measured and released on 25.v.2006 at Lama Camp (27°15'71"N 92°46'01"E) near Eaglenest Wildlife Sanctuary, Arunachal Pradesh, India. Rectrices from the distinctive tail, which distinguish it from its congeners, one secondary flight feather from the wing and the photographs included here have been deposited in the collection of the Bombay Natural History Society, Mumbai, India (D.B. No. 3/2006, Reg. No. 28981).

### 2.2 Diagnosis

The new species, an obvious *Liocichla* (including the marked *Leiothrix*-like jizz), has the overall colour olive with a black cap, prominent orange-yellow lore (between the eye and the upper mandible, not including the forehead) and yellow post-ocular spot (Pic. 4), and patches of golden yellow, crimson and white on the wing (Pic. 1). The olive is greyer above (Pic. 6) and bright yellowish on the breast (Pic. 9). The closed tail is blackish above and flame-coloured below with a prominent orange-red tip (Pics. 10 & 12). The bird is very different from the sympatric Red-faced *Liocichla* but more similar to the other two species, especially *L. omeiensis* (Pic. 2). This latter species has a grey cap, less prominent lore and post-ocular markings, grey underparts, and an olive tail with black bars above (Pic. 11) and just a hint of red on the underside with yellow tips to the outer rectrices (Pic. 15). *L. steerii* shares the brighter underparts and, to an extent, the prominent lores of





**Pic. 1.** The holotype of **Bugun Liocichla Liocichla bugunorum** sp nov. It was photographed on 25.v.2006 at Lama Camp just outside the boundaries of Eaglenest Wildlife Sanctuary, Arunachal Pradesh, India. The overall colour of the bird is olive which tends to look greener in the shade (see Pic. 6) and neutral grey in bright light (a camera flash for instance). This is probably a male bird.

*L. bugunorum* but its wing pattern, tail and cap are very different.

### 2.3 Description of the holotype

**Overall:** Olive; the duller greyish-olive above (Pic. 6) appears greener in the shade and greyer in bright light (including camera flash—Pic. 1); a grey band separates the yellow-olive of the chin from the brighter yellow-olive of the breast (Pics. 1, 3 & 8); the bright colour of the breast fades into dull olive grey on the lower abdomen.

**Head:** The black feathers of the cap are erectile (Pics. 3–4); the ear coverts are grey while the rest of the sides of head including the chin and a crescent behind the ear are different shades of brighter olive (Pic. 3); a prominent triangular orange-yellow loreal patch and a bright yellow post-ocular streak (against upper half of eye) give a spectacled appearance (Pic. 3); the two striking features are separated by a black area about half the diameter of the eye.

**Wing:** There is extensive golden yellow at the base of remiges (with some reddish tinge), on adjacent coverts and along the

lower edge of the closed wing (Pics. 1 & 6); there are 17 remiges with nine primaries (Pic. 7); the sixth primary is the longest but the seventh and eighth are only a little shorter (Pic. 7); the tips of remiges vary from acute (first primary) to flat (last secondary); the remiges have black shafts (any white on the shaft in the photos being camera flash highlights) and are mostly slaty-black with the amount of yellowish-olive increasing inwards from the first primary; all the secondaries have a crimson drop on their outer edges, close to the tip, which form the sub-terminal crimson patch on the closed wing; all the remiges are tipped white, the secondaries more prominently (Pic. 8); the yellow on the primaries is narrower than that on the secondaries but extends further along the outer web resulting in the yellow lower edge of the closed wing (Pic. 1). The secondaries also have a white streak between the crimson drop and the golden-yellow at the base.

**Tail:** Square-tipped central tail feathers with outer rectrices progressively shorter resulting in a graduated appearance; the holotype had nine tail feathers; Pic. 12 clearly shows that

some feathers are missing; the tail is mostly blackish above with indistinct darker bars (Pics. 6 & 10); the tips of the outer feathers have some olive; all the feathers end in a spray of orange-red barbs, which emerge as a tuft at the point of the shaft (Pics. 10, 12 & 13); the underside of the tail (Pics. 12 & 14) is spectacularly colourful—the outer two pairs are flame-coloured while the inner feathers progressively become more olive (with some black barring) and finally black (Pic. 12); the shafts change from brownish to bright yellow in the outer third of the tail; the outer pair of undertail coverts are black with broad red terminal edges and bright yellow lateral margins while the inner pair lacks the yellow.

**Bare parts:** The eyes are dark reddish-brown; the bill is pale translucent horn in colour distally and darker and more opaque in the basal half (Pic. 3); the legs and feet are flesh coloured.

**Measurements:** The total length was measured with the squirming bird stretched out and hence should be treated as approximate. Other measurements were taken with the bird held more securely and with Vernier calipers and hence are accurate to a millimeter or better. Total length 220 mm (approx.); bill: skull to tip 14 mm, along gape 18.5 mm, maximum depth 6 mm; wing chord 85 mm; tarsus 32 mm; tail 95 mm.

#### 2.4 Other individuals

Another bird “Bird #2” had been netted earlier on 21.v.2006 in the same area (within 10 m of where the holotype was netted) but escaped after only a few photographs had been taken. It differed from the holotype in the duller yellow-olive on its wings, much duller copper-red on underside of tail, no red in undertail coverts and in having broad yellow tips to tail feathers. The colours of the bare parts of Bird #2 were as of the holotype. Bird #2 has been depicted in some photos in this work.

Though the two birds were not sexed, the plumage differences between the holotype and Bird #2 are perhaps due to their differing sex. All the birds seen in May 2006 (breeding season at 2,300 m) were in pairs, while small flocks were seen in January 2005. Furthermore, the holotype was distinguishable in the field on account of its missing tail feathers and I never saw it outside that area nor did I see any other “male” in that area. These two factors suggest that the two netted birds were an adult (breeding?) pair and not an adult-subadult combination. The plumage differences between the two—bright red on the ventral side of the tail of the holotype being replaced by fainter red or yellow in Bird #2, and the duller wings of the latter suggest that the holotype is a male and Bird#2 a female. It may be noted that the male and female labels in the photo captions are enclosed in quotes, indicating that proper sexing was not carried out.

During observations on 3.i.2005 I had noted a second reddish wing patch at the base of the remiges (as had Fredrik Ellin in March 2006, *verbally*), similar to that in *L. omeiensis*, but this was not seen on any bird in May 2006. The crimson at the base of remiges in *L. omeiensis* has been reported to abrade by Hewston (2004) who also claims that if present the second wing patch is an easier means of sexing a bird but the constant difference in tail colour is more reliable in this respect. Pic. 1 does show a reddish tinge on the golden-yellow base of remiges.

#### 2.6 Vocalisations

The song of *L. bugunorum* was first noted by Ellin and Peter Schmidt at Lama Camp on 24.iii.2006. Subsequently, at the same location on 9.iv.2006 Margaret Widdowson, Michael Catsis and I recorded the song on tape and played it back to call the birds out. Pic. 16 displays sonograms of four different vocalisations. The bottom-right portion of the montage shows them juxtaposed for comparison. The vocalisations may be

**Pic. 2.** *Liocichla omeiensis* male (Natural History Museum, Tring, U.K.). Note the lack of any yellow-olive on the grey underparts, and the barely noticeable pale eye markings.





**Pic. 3.** *L. bugunorum* holotype (left) and Bird #2 (right). The holotype and Bird #2 are probably male and female, respectively. The crests of both sexes are erectile.



transcribed as: **16.A** “weee-keew” **16.B** “yu-weee-keew” **16.C** “wieu.u-wee.i-tuu.i-tuu.uw-tu.oow”, these notes on a descending scale, slightly slurred and inflected at the end **16.D** “weei.u-tuuu.i-tuu.uw-tu.oow”, these notes similar to the last four of 16.C but higher in pitch and more stressed. The initial consonant is barely audible in all these notes.

All the notes are fluty, usually with a terminal inflection and quite distinctive. The vocalisations 16.A–16.C are part of a longer sequence of a bird responding to song playback on 9.iv.2006. 16.C is similar to that described by Ellin & Schmidt (*pers. comm.*) and is probably the “normal” song. However, the song can start from any of the five notes and end at any subsequent note but always with the notes in that sequence. 16.D was the bird’s preferred response to playback in May 2006; it is similar to 16.C but higher in frequency and missing the first note. 16.A seems to be a subset of 16.B with a minor variation.

### 2.7 Similar species

*L. bugunorum* is very different in plumage from the sympatric *L. phoenicea*. It has a mixture of features of the other two *liocichlas* though it seems to be closer both vocally and visually to *L. omeiensis*.

The principal morphological differences between *L. omeiensis* and *L. bugunorum* are listed in Table 1. The latter is about 10% larger in size in all measurements, except the bill which is smaller. However, it must be noted that with just a single specimen I have no information on the intra-specific variations of these values. *L. bugunorum* has a black cap vis-à-vis grey with dark brown forehead in *L. omeiensis*; two clearly separated features straddling the eye vis-à-vis a somewhat broken eye-ring—including a large, bright, orange-yellow triangular lore spot vis-à-vis most of the lores being dark

brown; forehead black vis-à-vis brownish; crescent behind ear coverts olive vis-à-vis reddish-brown; bright yellow-olive underparts vis-à-vis grey; mostly blackish uppertail with indistinct darker bars vis-à-vis olive with black bars; underside of tail (essentially the underside of the two outermost tail feathers) flame-coloured vis-à-vis olive with a faint reddish tinge; tips of outer rectrices have orange-red tips vis-à-vis broad yellow tips.

*L. steerii* differs from *L. bugunorum* in having a grey crown streaked with white, a differently shaped pre-ocular spot, grey rump contrasting with olive back, an olive upper tail with white tip and lack of red in under tail coverts.

Sonograms of *L. omeiensis* and *L. steerii* from recordings in Scharringa 2006 are shown in Pic. 17 and 18, respectively. Another version of the *L. omeiensis* song has been transcribed as “w’yii-i-w’yii-u-w’yiiwi-w’yii-u” (BirdLife International 2003). The *L. omeiensis* recordings in the British Library Sound Archives and others provided by Per Alström are similar to those in Pic. 17. The vocalisations of *L. steerii* are clearly different from those of *L. bugunorum*. *L. omeiensis* vocalisations have a similar quality to those of *L. bugunorum* but the individual notes of the latter are simpler, i.e. with less modulation vis-à-vis multiple peaks, and more rounded vis-à-vis sharper structures, and the notes of the song descend farther in pitch.

## 3. Ecology

### 3.1 Sight records of the species

Prior to May 2006 *L. bugunorum* had been seen on:

- i. 12.i.1995. A pair in late afternoon at Lama Camp, Location 1. (Fig. 2).
- ii. 3.i.2005, 15:00 hrs., 2,320 m. A flock of six with *Cutias Cutia nipalensis* at Lama Camp, Location 1.
- iii. 3.i.2005, 15:45 hrs., 2,250 m. A flock of four with Red-headed Laughingthrushes *Trochalopteron erythrocephalus*<sup>1</sup> at Lama Camp, Location 2 (Fig. 2).
- iv. 4.i.2005, 15:15 hrs. A flock of six at location of sighting iii.
- v. 24.iii.2006, 06:00 hrs. A pair at Lama Camp, Location 2 (Ellin, *pers. comm.*).
- vi. 24.iii.2006, 07:30 hrs. A singing pair, close to sighting v (by Ellin & Schmidt, *pers. comm.*)
- vii. 5.iv.2006, 07:00 hrs. More than two birds with Blue-

<sup>1</sup> Rasmussen & Anderton 2005.



**Pic. 4.** *L. bugunorum* holotype “male” (top) and Bird #2 “female” (bottom).

winged Laughingthrushes *Trochalopteron squamatum*<sup>1</sup> at Location 3 (Fig. 2) and on 7.iv.2006, 11.00 hrs., over three birds with Red-headed Laughingthrush and Bar-throated Minla *Minla strigula* between Locations 1 & 2 (Marques 2006; Ritschard 2006).

- viii. 8.iv.2006, 07:00 hrs., 2,060 m. A flock of four, 2 km above Bompou, 27°04'32"N 92°24'07.6" (Simon Allen, Michael Catsis, Margaret and William Widdowson, and I).
- ix. 9.iv.2006, 07:00 hrs. A singing pair, Lama Camp, Location 2 (observers of viii).

### 3.2 Habitat and habits

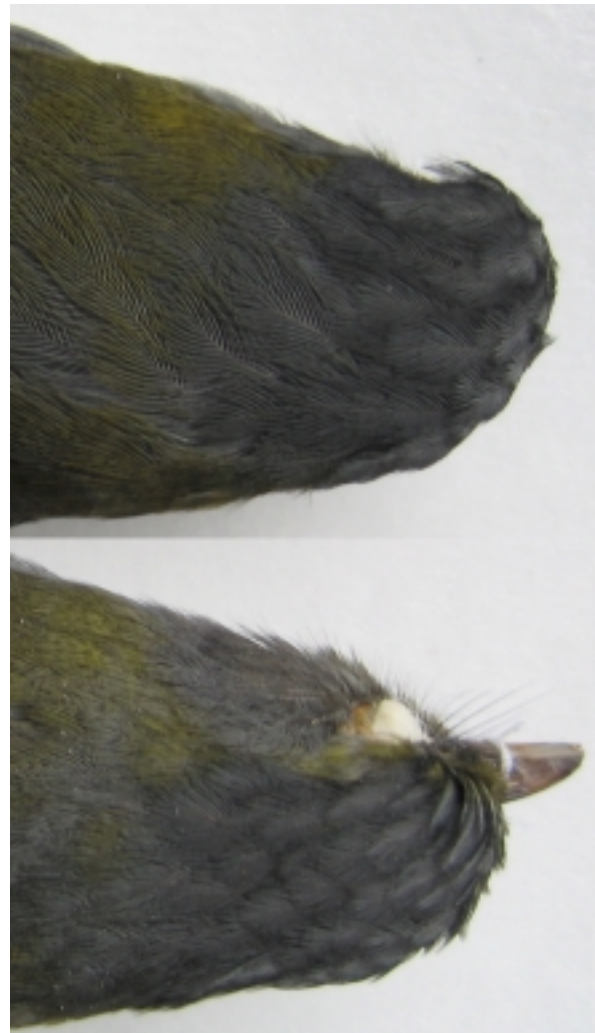
All sightings except one have been on heavily disturbed hillsides (2,060–2,340 m) with dense shrubbery and small to medium sized trees (remnants after extraction of tall timber). Only the Bompou sighting was at the edge of primary forest. Clearly, the species can exist in disturbed areas and utilize a variety of vegetation types. This is more or less identical to the habitat preference of *L. omeiensis* (BirdLife International 2003). In both cases, this versatility regarding habitat usage is somewhat at odds with the small, highly localised population. *L. bugunorum* has been observed at all heights—from the ground to the canopy of tall trees (30 m), hopping on the ground, working through the undergrowth, in tangled vines and even tree-creeping like *Cutia nipalensis*.

*L. bugunorum* have been observed in flocks of 2–6 birds in January. In April, they were seen in pairs as well as in small flocks. In May, all sightings were of pairs. They have been seen by themselves or in the company of, variously, *C. nipalensis*, *T. erythrocephalus*, *T. squamatus* and *Minla strigula*.

While they frequent dense shrubbery they seem not to be particularly shy and a substantial fraction of the sightings have been in exposed situations.

During the week starting 21.v.2006 three pairs of birds responded to song playback—one (Pair 1) right at the Phua Rung camp site, another (Pair 2) about 400 m lower down the ravine, and the third (Pair 3) at Location 2 (Fig. 2). Pair 1 readily responded to playback on most days, especially early in the morning and in the afternoon. On the first day, the birds approached quite close, moving about in shrubbery just a few meters from the audio-player. However, after the first capture / escape there was a noticeable increase in their aversion to showing themselves openly and after the first couple of days they mostly called back from the top of a nearby tree, almost never descending to the undergrowth. Pair 2 responded strongly to playback on the first two attempts, coming in from about 150 m away to investigate, but on subsequent days confined themselves to an occasional response from far away. Pair 3 always responded to playback but they rarely approached closer than 50 m from the observers. Therefore, while playback seems to be a good tool

**Pic. 5.** *L. omeiensis* male (top) and female (bottom). Note the grey crown unlike the black crown of *L. bugunorum*. (Photo: Nigel Collar. Specimen courtesy: Natural History Museum, Tring, U.K.)



<sup>1</sup> Rasmussen & Anderton 2005.





**Pic. 6.** *L. bugunorum* holotype “male”. The upper plumage is dull greyish-olive.. This photo also shows a reddish tinge on the golden secondaries (see text).

for drawing out birds, the intensity of the response varies between individuals and perhaps on the relative locations of the audio-player and the centre of their territory. The male of Pair 1 (the holotype) lacked two of its outermost right-side rectrices, which made it readily distinguishable in the field. I never saw this bird anywhere else and no other male was seen in its area. I also never saw or heard more than one pair of birds at a time at any of the three locations. While one cannot make a definitive statement in the absence of individually marked birds, these observations are consistent with pairs inhabiting well-defined territories.

The first two pairs inhabited the same ravine separated by about 400 m distance (along the slope) and c. 100 m alt.. The third pair frequented the adjacent ravine about 300 m away. These pairs readily responding to playback, at least initially, and vocalised on their own several times daily. Therefore, the lack of vocalisations including response to playback from other areas with similar habitat is surprising.

The only numbers one can put against the population are four birds near Bompou on 8.iv.2006 and the ten separate individuals seen on 3.i.2005 near Lama Camp. Despite repeated attempts at finding the birds using tape playback in May 2006 I encountered only three (breeding?) pairs near Lama Camp and none near Bompou. While the population is unlikely to be just 14 birds, clearly, the species is far from numerous.

Pair 1 (May 2006) were observed feeding on small berries one morning. On another day, they were seen exploring the tangled vines on a tree and feeding (insects or vegetable matter?)

## 4. Discussion

### 4.1 Taxonomic status

Evaluating the relative status of taxa is not easy (Helbig et al. 2002), especially when all other congeners are allopatric. Visually and aurally, *L. bugunorum* is most similar to *L. omeiensis* but there are many points of difference between them: in vocalisations, ten features of plumage, and size (Table 1). While future surveys may extend their ranges towards each other the balance of probability of finding intermediate populations, showing a cline in all the above differences is low. Furthermore, *L. bugunorum* differs from *L. omeiensis* and from *L. steerii* in its plumage as much as the latter differ between themselves. *L. omeiensis* was elevated from subspecies (of *L. steerii*) to species (Cheng 1987). These factors make a strong case for assigning specific rank to the Eaglenest taxon.

### 4.2 Status and conservation

*L. bugunorum* is presently known only from Eaglenest. The species may eventually be discovered in adjacent Bhutan and also further east in central and eastern Arunachal Pradesh but the fact remains that despite being spectacularly colourful and quite distinctive in both plumage and vocalisations the species was unknown to science until now. Choudhury (2003) did not encounter this species while surveying Eaglenest for birds over many visits across several years, which suggests that the population, even in Eaglenest, may not be large.

All sightings of *L. bugunorum* except one have been in Lama Camp, a heavily logged tract, within the Bugun community forest area just outside Eaglenest Wildlife Sanctuary; the one exception falls inside the boundaries of





**Pic. 7.** Spread-out upper wings of *L. bugunorum* holotype "male" (top) and Bird #2 "female" (bottom)

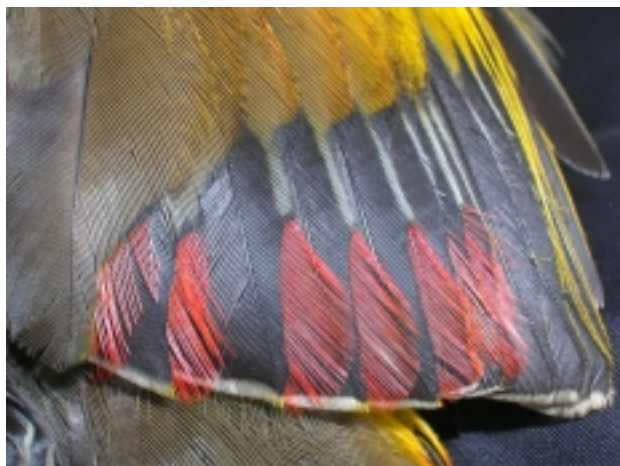


Eaglenest. Eaglenest is part of the much larger Kameng protected area complex spread over 3,500 km<sup>2</sup> of contiguous closed canopy forest in East and West Kameng districts of Arunachal Pradesh and adjacent Assam covering an altitudinal range of 50–3,300 m, the largest such area in western Arunachal. Eaglenest (218 km<sup>2</sup>) and Sessa (100 km<sup>2</sup>) sanctuaries are a small critical constituent of the complex since all the high altitude areas (> 2,000 m; where *L. bugunorum* has been seen) of the Kameng complex lie within them. Furthermore, Eaglenest is a microcosm of the entire complex as it contains within itself all altitudes and vegetation types between 100–3,300 m.

Eaglenest has remained largely untouched despite lack of efforts towards its conservation. The Eaglenest Biodiversity Project (Athreya 2005, 2006; and references therein) has focused on bringing together the Forest Department and the local Bugun community into protecting the area jointly. The Buguns are keen on preserving the area to attract birdwatchers to augment their community finances. We are also looking at ways and means of reducing the community's dependence on forest timber for fuel and construction.

A more potent threat to the area has been the plan to build a major highway through Eaglenest, passing right through Lama Camp, with

**Pic. 8.** Progressive close-ups of the upper wing pattern of *L. bugunorum* holotype "male"







**Pic. 9.** *L. bugunorum* holotype "male". Both sexes have yellow-olive underparts, brightest on the breast and fading into a duller shade on the belly.

**Pic. 10.** (below) *L. bugunorum* holotype "male". The upperside of tail is predominantly black with indistinct darker bars. The fraction of olive green increases towards the outer rectrices.



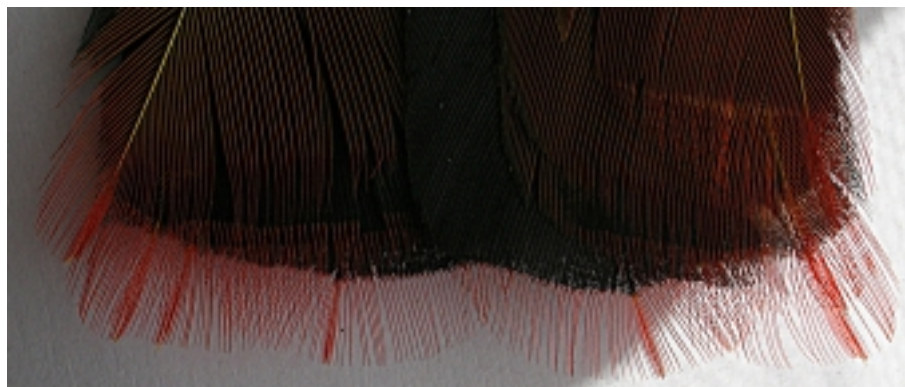
**Pic. 11.** *L. omeiensis* male. The barring on the upperside is more prominent as the ground colour is lighter.



**Pic. 12.** (right) *L. bugunorum* holotype "male". The pattern on right-most feather makes it the counterpart of the third outer feather on the left suggesting that two feathers on the right are missing. The odd count suggests that a third feather may also be missing.



**Pic. 13.** (left) *L. bugunorum* holotype "male". The terminal orange-red barbs form a denser tuft at the location of the shaft. The terminal section of the shafts are yellowish.



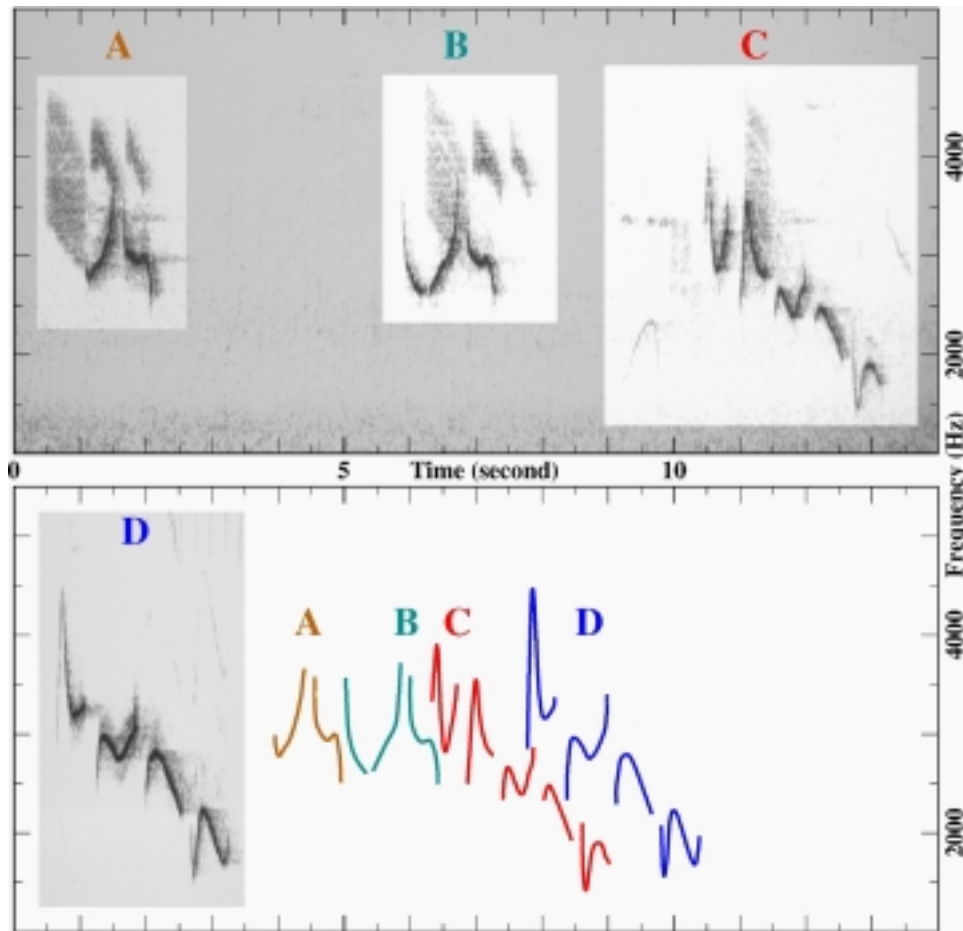




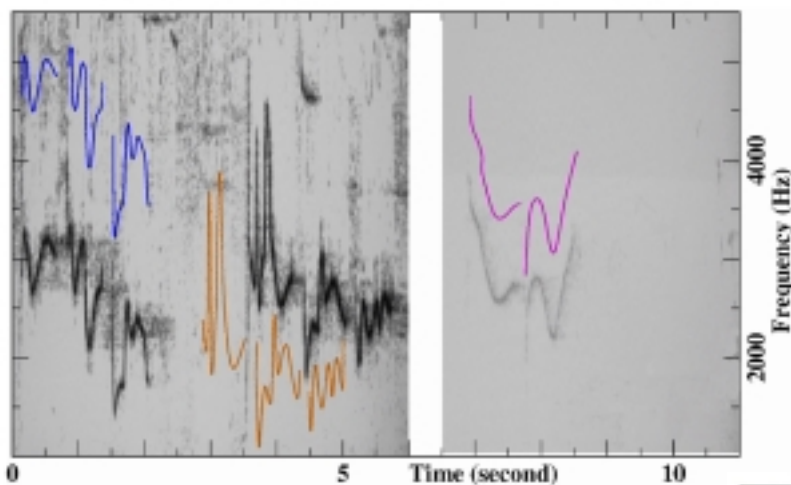
**Pic. 14.** *L. bugunorum* holotype “male” (top) and Bird #2 “female” (right). The closed underside of tail appears as a solid sheet of orange-red flame in the “male”. The blue shade in the “female” undertail coverts is a camera flash artifact – the actual colour is black.



**Pic. 15.** *L. omeiensis* male (top) and female (right). The ground colours are duller than in *L. bugunorum* but the terminal bands on the tail feathers are broader.

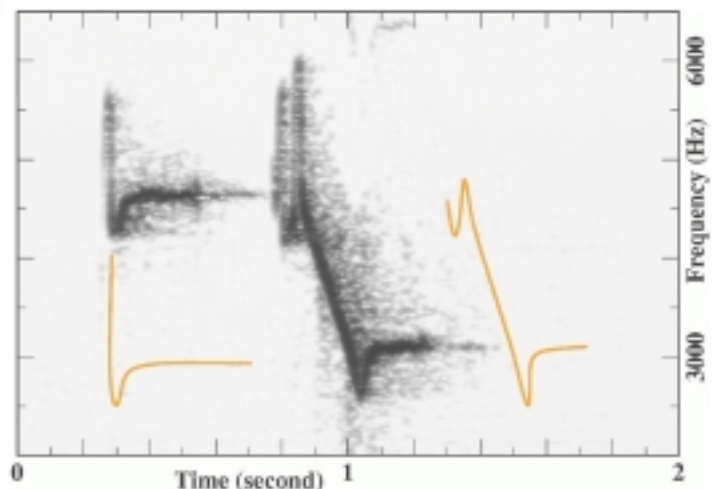


**Pic. 16.** This montage of sonograms displays four different vocalisations of *L. bugunorum*. All were in response to tape playback though sonogram C (red) is very similar to the un-elicited song of the bird. The bottom right collection depicts colour coded tracings of the same four vocalisations for easy inter-comparisons—they retain the temporal and frequency scale and are faithful reproductions of the ridges on the sonograms. The diffuse 3-note structures seen in sonograms A (brown) and B (cyan) are interlopers produced by a nearby Streaked Laughingthrush *Trochalopteron lineatum*<sup>1</sup>, as is the similar single diffuse spur sitting above the second note of C (red). A, B, and C were part of a sequence from the same bird but the display transfer functions have been modified to minimize the contamination due to *T. lineatum*. The notes are very fluty, their quality distinctive when once heard, and usually have an inflected tail.



**Pic. 17.** Sonograms of *L. omeiensis* from (Scharringa 2006). The temporal and spectral scales are as in Pic. 16. The overall quality of the notes are somewhat similar but look and sound quite different. The colour tracings of the ridges show the overall structure of the vocalisations but have been shifted in time and frequency from the actual ridges for clearer delineation.

**Pic. 18.** Sonogram of *Liocichla steerii* from recordings in Scharringa (2006). The call is at a higher frequency than that of *L. bugunorum*. The colour tracing and spectral scale of the plot is the same as for the previous sonograms but time axis is greatly magnified.



<sup>1</sup> Rasmussen & Anderton 2005.

unpredictable consequences for the *L. bugunorum* population. The birds survive in the Lama Camp scrub but, clearly, they do not thrive, which suggests (unknown) ecological obstacle(s) to an increase in their population; a busy highway could well push this spectacular bird into local extirpation, which could also be extinction.

#### 4.3 On the lack of a full specimen

Given the very small known population, I felt it would be inappropriate to collect a specimen, especially as that would have affected one of only three known (breeding?) pairs. So only some feathers which had worked loose (after the photographs were taken) were collected as type material. Should the census planned for next season indicate a larger population, steps will be taken to obtain a full specimen after seeking permission from the appropriate authorities.

One could have described the taxon only after collecting a specimen after the census but several factors argued against a delay:

- i. publicity from the formal description of a new and spectacular bird species would significantly facilitate our ongoing conservation efforts at Eaglenest;
- ii. the areas where the birds have been seen are the subject of litigation over the construction of a major highway;
- iii. our efforts at conservation-oriented ecotourism resulted in a surge in visitors last season and a new taxon whose description is only hinging on the collection of a specimen may tempt a visitor into an illegal collection effort disrupting the small population there as well as prejudice the authorities against the ecotourism effort; and
- iv. I have enough material to satisfy the technical requirements of description of a new species according to the International Commission for Zoological Nomenclature.

#### 4.4 Etymology

All observations of this taxon, except the first, were carried out during field work under the Eaglenest Biodiversity Project (Athreya 2005, 2006). Local community participation and development have been the cornerstones of our conservation efforts there and Mr Indi Glow of the Bugun tribe has played a very critical role throughout the project. Furthermore, all sightings of the taxon except one have been in Bugun community forest. It gives me great pleasure to acknowledge the contribution of Mr. Indi Glow and others by naming the new taxon after their Bugun tribe. The word Bugun (both 'u' rhyme with "put") is a masculine term used by the community to refer to themselves. It is believed to mean "people of the valley = valley dwellers" but the etymology is uncertain and its origins may lie in another language. The specific name *bugunorum* [= (*Liocichla*) of the Buguns] is the invariable genitive plural of the latinised noun *Bugunus*.

#### Acknowledgements

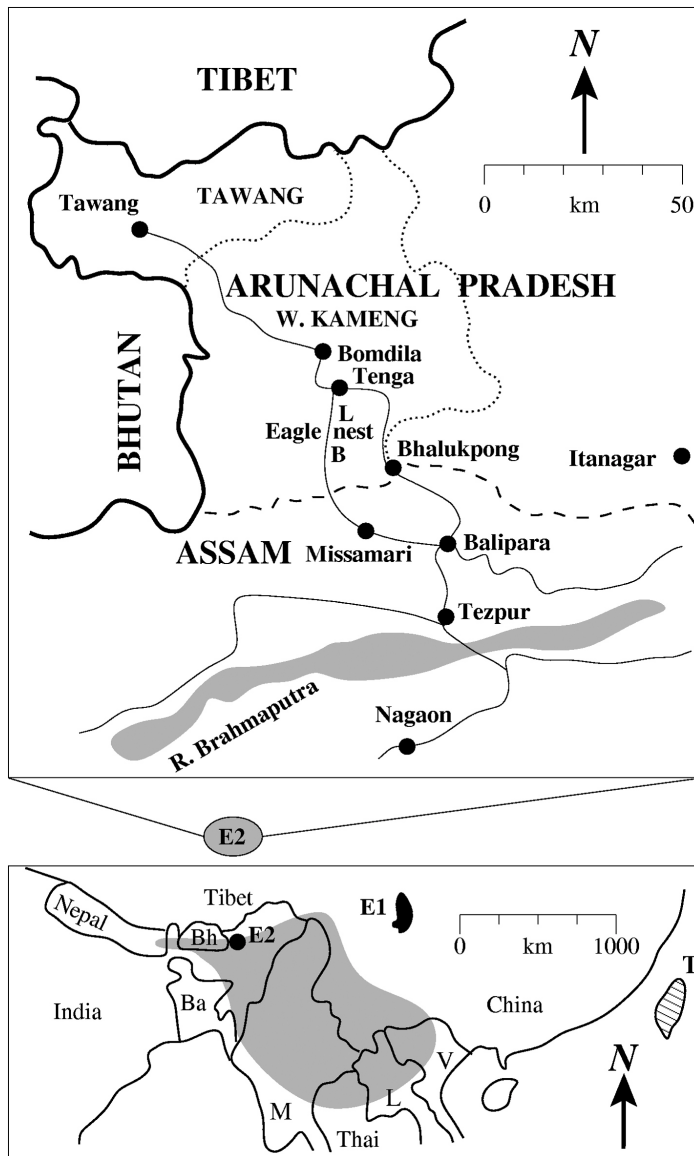
Dorje Raptan, while netting the bird, and Nigel Collar, during the preparation of this manuscript, made crucial contributions to this work. Nigel also provided photos and measurements of the two *L. omeiensis* in the Natural History Museum, Tring, U.K. After my initial sightings Fredrik Ellin

and Peter Schmidt provided the major breakthrough by identifying the song of the species. Goutam Narayan, Nandita Hazarika, Vidya Athreya, Aasheesh Pittie, Mike Catsis, Simon Allen, William and Margaret Widdowson, Herman Mays, Mathias Ritschard, Aniruddha Belsare and Neelim Khaire helped at various stages. David Normand helped in getting the Latin correct. Jelle Scharringa, Mike Catsis, Cheryl Tipp (British Library Sound Archives) and Per Alström provided cuts of *L. omeiensis* vocalisations for comparison. A special thanks to Dhananjai Mohan and Pratap Singh for their contribution, and an apology – they traversed the subcontinent at short notice to mist-net the bird in January 2005. Unfortunately, the call I had recorded earlier, that they used, proved to be not of the *Liocichla* but of a *Leiothrix* in the same bush—I wish things had turned out otherwise! The Forest Department of Arunachal Pradesh has been very supportive of our work at Eaglenest and patient and liberal with our several requests for mist-netting this bird since January 2005. The Eaglenest Biodiversity Project, during which the new taxon was observed in detail, was supported by grants from the Rufford-Maurice-Laing Foundation (U.K) and Ford Foundation/Winrock, India. Comments and suggestions from the referees, Edward Dickinson, Pamela Rasmussen and Jochen Martens, were of great help—any shortcomings of this paper are in spite of their efforts. Dr Rasmussen strongly disapproved of naming a new species without a full specimen but nonetheless was kind enough to review the manuscript. My thanks to everyone!

#### 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*. 2<sup>nd</sup> ed. Delhi: Oxford University Press.
- Athreya, R.M. 2005. Web site of the Eaglenest Biodiversity Project: <http://www.clsp.jhu.edu/people/zak/ramana>.
- Athreya, R.M. 2006. *Eaglenest Biodiversity Project I (2003-2006); Conservation resources Eaglenest Wildlife Sanctuary*. Report submitted to the Rufford-Maurice-Laing Foundation (U.K). Kaati Trust, Pune.
- BirdLife International. 2001. *Threatened birds of Asia: The BirdLife International Red Data Book*. BirdLife International.
- BirdLife International. 2003. *Updated excerpts from BirdLife International 2001* in species account for Omei Shan *Liocichla* under <http://www.birdlife.org/datazone/species/index.html>
- BirdLife International 2006: Species fact sheet: *Liocichla omeiensis* at <http://www.birdlife.org>.
- Cheng T-H 1987. *A synopsis of the avifauna of China*. Beijing: Science Press.
- Choudhury, A.. 2003. Birds of Eaglenest Wildlife Sanctuary and Sessa Orchid Sanctuary, Arunachal Pradesh India. *Forktail* 19: 1–14.
- Dickinson, E.C. 2003. *The Howard & Moore complete checklist of the birds of the World*. 3<sup>rd</sup> ed. London: Christopher Helm.
- Gould, J. 1837. *Icones avium, or figures and descriptions of new and interesting species of birds from various parts of the world*. Pt. I, pll. 1-10. London.
- Helbig, A.J., Knox, A.G., Parkin, D.T., Sangster, G. & Collinson,

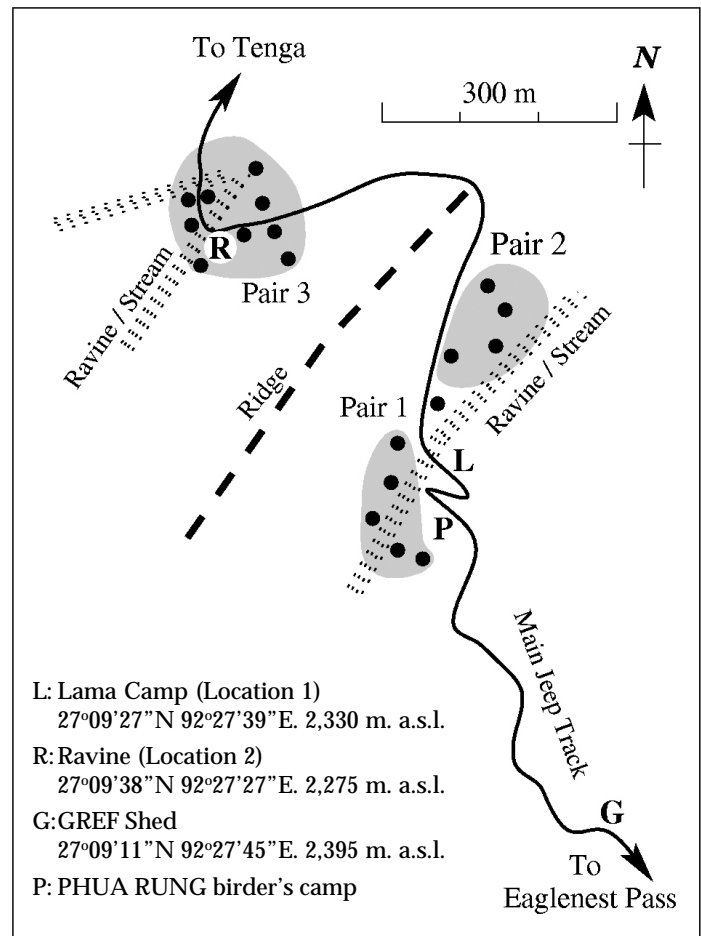




**Figure 1.** The bottom panel (adapted from BirdLife International 2006) shows the known ranges of the four species of *Liocichla*. The abbreviations are Bangladesh (Ba), Bhutan (Bh), Laos (L), Eaglenest (E2), Emei Shan and its neighbouring areas (E1), Taiwan (T), Thailand (Thai) and Vietnam (V). *L. steerii* is endemic to Taiwan; *L. omeiensis* is confined to E1; Bugun *Liocichla* is known only from E2; the grey-shaded area delineates the range of Red-faced *Liocichla*. The upper panel provides a more detailed view of the Eaglenest area. The Bugun *Liocichla* has been recorded from Lama Camp (L) and Bompou (B), which lie along the Eaglenest road north and south of the Eaglenest ridge, respectively.

M. 2002. Guidelines for assigning species rank. *Ibis* 144: 518–525.

Hewston, N. 2004. The Omei Shan *Liocichla* (*Liocichla omeiensis*): <http://www.thesca.org.uk/articles/omeishan.html>.



**Figure 2.** Lama Camp area, outside Eaglenest Wildlife Sanctuary. The dots in the grey-shaded areas denote the approximate locations of sightings of the three pairs of Bugun *Liocichla* seen in May 2006. All the other sightings, except the one near Bompou (27°04'32"N 92°24'07.6"E, 2,060 m. a.s.l.) have also been in this area.

Marques, D. 2006. Field sketch of un-named *liocichla*: <http://www.orientalbirdimages.com>.

MacKinnon, J. & Phillipps, K. 2000. *A field guide to the birds of China*. Oxford University Press.

Rasmussen, P.C. & Anderton, J.C. 2005. *Birds of South Asia. The Ripley Guide*. 2 vols. Washington D.C. & Barcelona: Smithsonian Institution & Lynx Edicions.

Riley, J.H. 1926. A new species of *Liocichla* from the mountains of Szechwan, China. *Proc. Biol. Soc. Wash.* 39: 57–58.

Ritschard, M. 2006. Message # 7906, dated 17.v.2006 on Oriental Birding on Yahoo! Groups.

Scharringa, J. 2006. *Birds of Tropical Asia 3 DVD-ROM*. Recordists - Gardner, N.J. (*L. omeiensis*) and Scharringa, J. (*L. steerii*).

Swinhoe, R. 1877. On a new bird from Formosa. *Ibis* (4) 1: 473–474.

**Table 1. Principal morphological differences between *L. omeiensis* and *L. bugunorum***

Morphological part	<i>L. omeiensis</i>	<i>L. bugunorum</i>
Crown	Grey	Black
Forehead	Bright brown	black
Crescent behind ear coverts	Reddish-brown	Bright olive
Eye markings	Pale-yellow broken eyering	Two separate prominent spots – a large triangular orangish-yellow loreal spot and a bright yellow post-ocular streak.
Breast	Neutral grey	Bright yellow-olive
Underside of tail – “male”	Just a hint of reddish	Bright orange-red
Outer tail, below – “male”	prominent yellow tips	Concolorous with rest of feather
Underside of tail “female”	1. grey with just a hint of olive 2. Broad white tips	1. olive with a strong shade of copper 2. narrow yellow tips
Uppertail	Olive with black bars	Mostly black with indistinct darker bars
Red tip to tail	Not on outer feathers	On all feathers
Total length	205 mm	approx. 220 mm
Bill from skull	17 mm	14 mm
Tarsus	30 mm	32 mm
Wing (curved)	77 mm	85 mm
tail	85 mm	95 mm

Nigel Collar provided the measurements (except total length, which was obtained from BirdLife International 2006) and photographs of two specimens of *L. omeiensis* in the Natural History Museum, Tring, U.K. The *L. omeiensis* plumage description is based on these photos and on MacKinnon & Phillipps (2000). It may be noted that the measurements are based on just one individual of each species.

**T**he Bugun Liocichla was discovered during the field visits of the Eaglenest Biodiversity Project. Ramana Athreya initiated this project in November 2003 to improve the long-term conservation prospects of Eaglenest wildlife sanctuary. The three principle components of the conservation strategy include (i) documenting the flora and fauna (ii) identifying the factors which can affect their long-term survival and (iii) co-opting the local communities (Bugun and Sherdukpen tribes) in the conservation effort. The last component necessarily involves understanding the socio-economic needs of the two communities, their dependence on forest resources and identifying alternatives to non-sustainable exploitation of such resources. Generating employment and community revenue from ecotourism has so far been the focus of the community initiative.

The first phase of the project was completed recently and the targets achieved (to a greater or lesser extent) included basic inventories of some of the fauna of Eaglenest, demonstrating the ecotourism potential and convincing the local communities that conservation of Eaglenest can yield economic benefits. In the coming years the project will continue to carry out faunal inventories and community-organised ecotours, while expanding into nature/conservation education, understanding and reducing the dependence of the communities on forest resources and employment of local people in forest protection roles in partnership with the Forest Department.

Participation in the project is open to anyone with time, skill, resources and motivation. In fact, so little is known of the biodiversity of the area that skill is not a critical requirement – even people with minimal skills can contribute significantly towards the project goals.

Professional and amateur ornithologists may be interested in the Vacations-for-Conservation programme being organised as part of this project. Under this scheme, the project organises non-profit vacations in Eaglenest for naturalists. In return, the participants are expected to help with the faunal documentation. The participants get an opportunity to enjoy an inexpensive, organised vacation with experienced co-coordinators in a spectacular wilderness. The project gains human resources at no extra cost for the documentation work. The activity generates local employment and the local communities earn some revenue as a whole.

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Pune, India

# Birds of Dibru-Saikhowa National Park and Biosphere Reserve, Assam, India

Anwaruddin Choudhury

Choudhury, A. 2006. Birds of Dibru-Saikhowa National Park and Biosphere Reserve, Assam, India. *Indian Birds* 2 (4): 95–105.  
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An ornithological survey was conducted in Dibru-Saikhowa National Park and Biosphere Reserve in Assam between 1992 and 1996 with brief visits in 2001 and 2004. At least 24 Threatened species were recorded that included White-winged Duck *Cairina scutulata*, Baer's Pochard *Aythya baeri*, Pale-capped Pigeon *Columba punicea*, Spotted Greenshank *Tringa guttifer*, Slender-billed Vulture *Gyps tenuirostris*, White-backed Vulture *G. bengalensis*, White-bellied Heron *Ardea insignis*, Greater Adjutant-Stork *Leptoptilos dubius*, Sarus Crane *Grus antigone*, Bengal Florican *Houbaropsis bengalensis* and Black-breasted Parrotbill *Paradoxornis flavirostris*. In addition, 16 Near-threatened and, a few range extinctions were also recorded. Presence of two 'forest villages', habitat destruction through agriculture, logging, settlement, and poisoning of waterbodies for fishing, and erosion by rivers were noticed as major threats. Recommendations include inclusion of Amarpur within the park, translocation of 'forest villages', awareness campaigns and ecotourism. A checklist of 440 species, including historic records, is appended.

## Introduction

The Dibru-Saikhowa National Park and Biosphere Reserve is located in Tinsukia and Dibrugarh districts of Assam, India (27°35'–27°45'N 95°10'–95°40'E). A small part of the buffer zone is in Dhemaji district. The area lies in the Indo-Burma Global Biodiversity Hotspot (Myers *et al.* 2000) and the Assam Plains Endemic Bird Area (Stattersfield *et al.* 1998) (Fig. 1). The terrain of the park is flat and it is situated in the floodplains of the Brahmaputra and the Lohit Rivers. The elevation of the park varies from 110–126 m a.s.l. Other rivers that traverse through the park are the Dibru and the Dangori.

Dibru-Saikhowa was declared a wildlife sanctuary in 1986 encompassing 650 km<sup>2</sup>; however, while finalising the boundary of the sanctuary in 1995, its area was reduced to 340 km<sup>2</sup>. In 1999, its status was upgraded to that of a national park. However, the biosphere reserve covers the erstwhile wildlife sanctuary as well as fringe villages spreading over a total area of 765 km<sup>2</sup>.

The floodplain ecosystem of Dibru-Saikhowa has a large number of perennial and seasonal channels. These include the Kolomi (Paroparajan), Salbeel, Dadhia, Chabru, Laikajan, Ananta nala (Kolia nala, Hatighuli nala), Dimoruhola and Nayanadi. Numerous ox-bow lakes and wetlands are scattered through the park. Notable among them being Raidang, Burhi, Tilak, Thekera, Kathgora, Banko, Hatighuli, Dighali, Kurimari, Rongmola and Koliapani. Dighali and Kurimari have almost been silted up. During the wet season, areas like Toralipathar, Nagaon-pathar and Schoolgora-pathar become large seasonal wetlands, but remain dry during winter. In addition, innumerable lagoons form on the riverbeds of the Brahmaputra and the Lohit in winter.

The original natural vegetation was tropical wet evergreen rainforest with grassland and reed beds in the

riverine tracts and depressions. During the great earthquake of 1950, large parts of the reserve sank by a few meters, resulting in the regular flooding of the area. This was followed by the emergence of a new type of vegetation. 'Salix swamps' and deciduous forest now dominate the reserve, and evergreen forest is now restricted to a few patches (Choudhury 1998). About a third of the national park is covered with *Salix tetrasperma* and *Bischofia javanica*—the most abundant tree species. *Dipterocarpus macrocarpus* trees, which were common before 1950, are now rare. *Barringtonia acutangula*, which is a familiar species in the wetlands, was conspicuous by its absence. Grassland and reed beds cover another third of the park. The main reed and grass species are *Arundo donax*, *Phragmites karka*, *Erianthus ravennae*, *Imperata cylindrica*, *Saccharum* spp., etc. The buffer zone of the biosphere reserve covers wide riverbeds as well as adjacent villages.

The climate is tropical monsoon with a hot and wet summer and a cool and drier winter. The annual rainfall is 2,300–3,800 mm at Rongagora Tea Estate near Guijan. The temperature ranges from 7°C–35°C.

## Methods

The first systematic bird survey of Dibru-Saikhowa was done in 1992–1994 (Choudhury 1993, 1994b, 1997, 1998). Sarmah (1996) compiled a checklist for the area ten years ago. Subsequent literature pertaining to birds in the area includes Talukdar *et al.* (1995), Kazmierczak & Allen (1997), Allen (2002) and Das (2006). A more recent site account is available in Islam & Rahmani (2004). Some useful historic information is found in Baker (1902, 1904), Parsons (1935) and Stevens (1914, 1915a,b). There were quite a few unpublished trip reports, notable were Hornbuckle *et al.* (1998), Dryer & Lobo (2004), Prasad (2001), van der Wielen (2006) and Vermeulen (2003).



During fieldwork, I surveyed birds using direct observations, noting calls (only for some species) and by interviewing local forest staff, villagers, fishermen, graziers and hunters. Direct observations were made on foot along existing and newly cut paths, and from country boats along channels and flooded fields. The channels were used as transects. Motorboats were used only on the Lohit, Kolomy and Salbeel rivers. For the White-winged Duck, some forest staff and local youth were also engaged to record sightings. The first mid-winter waterbird census was also carried out in Rongmola area of the reserve in January 1993. I carried out a total of 79 days fieldwork in Dibru-Saikhowa: 69 days between July 1992 and May 1994, seven days in September 1996, one day in November 2001 and two days in the north-eastern corner in March 2004).

## Results

Details are provided for the more interesting and significant records, including 20 Threatened and 12 Near-threatened species, which were observed during the survey. Appendix 1 comprises a complete, updated checklist for the national park and biosphere reserve, including historic records and species recorded by other observers—but not seen by me. A total of 440 species were recorded, which include 24 Threatened, 16 Near-threatened and two Restricted-range species. There were 218 resident and 173 migrant (156 were winter migrants). For many others, the seasonal status was unclear.

## Some significant records

**Spot-billed Pelican *Pelecanus philippensis*** Vulnerable. Resident with local movement. Single birds seen in Koliapani, Motapung and Kolia *chapori* (*chapori* = sandy islet, sandbar, etc). Once four birds were seen in Dighalipathar. Five scattered birds observed near Kolia on 1.iv.1994. The largest raft of pelicans was of 28 birds on a *chapori* of the Lohit River, north of Churke *chapori* (1.iv.1994). Two nesting sites were located, but both were abandoned due to human disturbance. The actual number of nests could not be counted due to this. The nests were in *Bombax ceiba* trees, one in Churke *chapori* and two c. 1.5 km west of Hatighuli. This pelican is rare nowadays.

**Darter *Anhinga melanogaster*** Near-threatened. This species is not uncommon in the reserve and was observed on numerous occasions, in small groups or sometimes alone. They also nest in the park, north-east of Dighali-pathar. A photograph by Asif Hazarika (shot in November 1993 and seen by me) showed >30 birds with many immatures in flight.

**White-bellied Heron *Ardea insignis*** Endangered. A single bird was observed in Salbeel area on 24.xi.1993. It was standing in the waters of a channel that connects Raidang *beel* and Dangori River with Salbeel.

**Black Stork *Ciconia nigra*** The commonest stork during winter. It is seen almost everywhere from November to April, singly, in twos-threes or in small musterings. More than 40 were seen in Salbeel on 24.xi.1993. At night, the storks roost in the open sandy *chaporis* of the Brahmaputra and the Lohit rivers. One such roost was observed near Baluchar on 30.i.1994.

**White-necked Stork *Ciconia episcopus*** Rare in the park. About 10 were seen near Kolomy in November 1993. This stork is

usually seen in twos or threes.

**Black-necked Stork *Ephippiorhynchus asiaticus*** Near-threatened. Very rare with local migration. I saw it only twice, both times in Churke *chapori* on 1.iv.1994. One adult was seen in a small *beel* while at a different site, I observed four immature birds. The presence of immature birds suggested the possibility of nesting activity in the vicinity.

**Lesser Adjutant-Stork *Leptoptilos javanicus*** Vulnerable. A common resident, it also breeds in the park. Although no nests could be seen near survey transects, two nests were seen in an *Alstonia scholaris* in Balijan, just outside the park. The nests contained two fledgelings each and were about 30+ m above the ground. Away from the nests but in the same tree, one more immature bird was observed. This stork was mostly seen singly, in twos or in small musterings of four to five birds.

**Greater Adjutant-Stork *Leptoptilos dubius*** Endangered. Rare but present in the park. Breeding sites however, were not found within the park. The sighting locations were near Saikhowaghat (one bird on 1.ix.1992), near Baluchar (one adult and three immature on 13.ii.1993), and near Amarpur (four single birds on 8.ix.1993). At a roost in the Laluka *kabrstān* (Moslem graveyard) near Dibrugarh town, c. 25 km from the park's boundary, 23 birds was observed on 24.vi.1993.

**Glossy Ibis *Plegadis falcinellus*** I observed seven birds feeding in the flooded Dhadum pathar on 11.ix.1996. Prior to that, four were seen in the same area on 6.vi.1996 (late Narayan Sarmah, *verbally*). This species was conspicuous by its absence during the 1992–1994 survey. Usually, the Glossy Ibis is present in small numbers in most of the major wetlands of eastern Assam, where it also breeds in Pani-Dihing Bird Sanctuary of Sivasagar (Sibsagar) district (Choudhury 1991a).

**Large Whistling-Duck *Dendrocygna bicolor*** Only four sightings recorded during the survey, all in twos. Near Kolomy (2.viii.1992), in Toralipathar and Paglipathar (both on 22.v.1993), and between Kolomy and Nagaon-pathar (1.viii.1993). In Toralipathar, the ducks were seen in a big *Ficus* tree. The species is uncommon all over Assam (Choudhury 2000).

**Bar-headed Goose *Anser indicus*** A winter visitor to the area. I have seen it only thrice: a gaggle of 20 near Dotungmukh, Amarpur on 21.xii.1993, two flying near Lalbeel, Amarpur on 22.xii.1993 and 25 in Dhadum Pathar, c. 3 km east of the park, on 25.iii.1993. More than 60 reported from Dhadum Pathar in the winter of 1995–1996 (late Narayan Sarmah, *verbally*).

**Common Shelduck *Tadorna tadorna*** This is a rare and occasional winter visitor to Assam (Choudhury 2000). The only sighting from the park was of nine birds in Rongmola *beel* on 19.xii.1993. My local guides had never seen this duck, which also speaks of its scarcity in the area.

**White-winged Duck *Asarcornis scutulata*** Endangered. A very rare resident. Four nests were located in trees in Kochuonipathar (just outside the sanctuary): in a *Salix tetraspema* (Choudhury 1993) near Kolomy tini-ali, in a *Bischofia javanica* in Mora Dolki, in a *Pterospermum acerifolium*, and near Panikauri pathar in a *B. javanica*. One more nesting site was reported from between Kolomy camp and Kolomy tini-ali where the tree could not be located. Sightings by me and other

Table 1. Sightings of the White-winged Duck *Cairina scutulata*

Date	Site	Remarks
1991	Mora Dolki	One egg collected by a villager from a nest in Hatipolia <i>Pterospermum acerifolium</i> tree by an ex-tea garden labourer, two adults flew away (Jogesh Kharia, <i>verbally</i> ).
i-ii.1992	Holumari hula	Six seen early in the morning (Hari, <i>verbally</i> ).
iv.1992	Kochuoni Pathar	Eggs collected by a villager of Baghjan.
iv.1992	Hatighuli	Two seen in a tree (by Forest staff).
26.vii.1992	Dighaltarang	Two in flight.
x.1992	Houlmari hula	Two seen at c. 15:00 hrs on water.
1.xi.1992	Kolomy	Five seen in flight.
i.1993	Borbhanga beel	A pair seen.
ii.1993	Baghjan	One accidentally caught in a fishing trap.
10.iii.1993	School-gora	Two in flight early in the morning.
v.1993	Hatighuli	Two seen c. 1.5 km W of Hatighuli at c. 14:00 hrs.
vi-vii.1993	Near Kolomy camp	Ducklings (unspecified number) caught in a fishing trap and later collected by a villager of Garamjan.
15.x.1993	Salbeel	Three adults on water.
24.xi.1993	Laijuri beel	Two doubtful in flight at c. 08:00 hrs.
1.v.1994	Torali	One on water amidst dense vegetation at c. 13:30 hrs.
7.ix.1996	Guijan	Call heard; birds flew from south to north at night.

observers engaged by me are listed in table 1.

**Spot-billed Duck *Anas poecilorhyncha*** Although it is a common species, occurrence of two subspecies with different seasonal status in the park was interesting. The nominate race *poecilorhyncha* is a winter visitor, and its records were significant as being its new easternmost limit of distribution. Its original known eastern limit was western Assam, c. 92°E (Ali & Ripley 1987), new easternmost location observed was Hollokbari near Koliachapori of Dibru-Saikhowa (95°30'E) (Choudhury 1994b). *A. p. haringtoni* is resident and also breeds in the park. The third race, *A. p. zonorhyncha*, which is also a winter visitor, is treated in Appendix 1 as a full species *vide* Rasmussen & Anderton (2005).

**Ferruginous Pochard *Aythya nyroca*** Near-threatened. It is a rare winter visitor to the park. I have recorded 50 birds in Rongmola beel on 17.i.1993, 19 in Tiphuk beel (just outside the biosphere reserve) on 2.iii.1993, 14 and 12 in Rongmola respectively on 8.xi.1993 and 6.iii.1994.

**Baer's Pochard *Aythya baeri*** Vulnerable. It is a very rare winter visitor to Assam (Choudhury 2000). Only one sighting of two birds in Rongmola beel on 19.xii.1993.

**Pallas's Fish-Eagle *Haliaeetus leucorhynchus*** Vulnerable. Only two sightings of single birds, one near Kathgora beel on 26.ix.1993 and the other near Dadhia on 9.x.1993.

**White-tailed Sea-Eagle *Haliaeetus albicilla*** Near-threatened. An occasional winter straggler to Assam (Choudhury 2000). An immature bird was seen in flight in the nearby Kobo chapori, just north of the park boundary in Dhemaaji district on 16.i.1990, during a different survey.

**Lesser Grey-headed Fish-Eagle *Ichthyophaga nana*** Near-threatened. A rare bird of the area. Only two sightings of single birds, near Balijan and Kolomy on 31.viii.1993.

**Greater Grey-headed Fish-Eagle *I. ichthyaetus*** Near-

threatened. Common breeding resident. It was among the most familiar of the large raptors observed during 1992–1996. A nesting pair was observed near between Kolomy and Dighalipathr in November 2001.

**Indian White-backed Vulture *Gyps bengalensis*** Critical. A common resident in 1992–1994, with many sightings, usually in association with *Gyps tenuirostris*. However, none seen in November 2001. During a recent survey, only eight nests could be located within 10 km of the park boundary (Choudhury *et al.* 2005).

**Slender-billed Vulture *G. tenuirostris*** Critical. A common resident in 1992–1994, with many sightings. However, none seen in xi.2001. At present the species has become extremely rare. During a recent survey, only two nests could be located within 10 km of the park boundary (Choudhury *et al.* 2005).

**Himalayan Griffon *G. himalayensis*** Only one sighting of three birds near a carcass, in association with *Aegypius monachus*, *G. bengalensis* and *G. tenuirostris* on 25.ii.1993, near Saikhowaghat. Apparently a winter straggler from the nearby Himalaya / Mishmi Hills. Incidentally, this species is now a common winter visitor to the reserve.

**Cinereous Vulture *Aegypius monachus*** Near-threatened. A small loose group of 6 birds seen in association with three *G. himalayensis*, and two–three *G. bengalensis* and *G. tenuirostris* near Saikhowaghat, just outside the boundary of the park on 25.ii.1993. They were in an open sandy chapori of the Lohit River. Two more present in another nearby chapori.

**Red-headed Vulture *Sarcogyps calvus*** Near-threatened. Although reported by late N. Sarmah and other observers, I did not see any in 1992–1994. The only bird I observed was on the ground, east of Saikhowaghat (between Dhola and Hahkhathi) in x.1989.

**Greater Spotted Eagle *Aquila clanga*** Vulnerable. I observed

a single bird at Churke chapori on 8.xi.1992, two birds at Rongmola beel on 6.xii.1992, and single birds at Torali and Dighali on 1.xi.1992.

**Lesser Kestrel *Falco naumanni*** Vulnerable. Only one sighting, probably on passage, at Dighalipathar on 1.xi.2003. A male was spotted in flight and then perched in a shrub. It had bluish grey head and wings. Primaries were blackish in perched bird. Its back was rufous without any black spot. While in flight, the under parts looked plain without markings.

**Swamp Francolin *Francolinus gularis*** Vulnerable. I observed small coveys in Amarapur on 21–22.xii.1993; at Raidang, west of Rongmola on 6.iii.1994 and in Erasuti chapori, in the extreme western end of the park on 20.iii.1994. Its call was heard in Churke chapori and in areas west of Chabru River. Overall it is rare in the park.

**Sarus Crane *Grus antigone*** Vulnerable. Among the rarest birds of Assam. No resident Sarus are found in the north-east. My only sighting was of two birds in Dhadum pathar (25.iii.1994). The Sarus were present throughout the last week of March as I again spotted them on 29.iii.1994. On 1.iv.1994 when I again visited the site, the cranes were not seen. However, local villagers reported their reappearance in that area in the first half of April. The locals told me that they never came across such 'big' birds in the area. Thereafter, I got reports of only one bird from Churke chapori, although I could not verify them. Subsequently the cranes were seen almost every year, their maximum number being 16 in December 1998 (late Narayan Sarmah, verbally). The birds were of the nominate race, *G. a. antigone* (with a conspicuous white neck-collar) whose known eastern limit was western Assam (c. 92°E) (Ali & Ripley 1987). The present record has extended its eastern distribution by about 500 km (95°35'E).

**Common Crane *Grus grus*** Chiefly a rare passage migrant. No sightings inside the park. A flock of 20 was seen in Dhadum pathar c. 3 km south of the park and at the edge of the biosphere reserve (23, 25.ii.1993). The flock remained throughout the second half of February and into a few days of March. On 6.iii.1993 I saw 19 cranes in the same area. However, I did not see the species in 1994. Discovery of a new crane migration route through the Dibang River (Choudhury 1994a) suggests that many Common Cranes fly over Dibru-Saikhowa during migration.

**Bengal Florican *Houbaropsis bengalensis*** Endangered. A rare resident of the grasslands. Two sightings besides some reports. I saw two birds in Laimekuri area of Amarapur on 9.ii.1993. Both the birds were brownish and hence, sex could not be determined (immature males are also brownish). A single male was spotted flying west of Lalbeel, also in Amarapur (22.xii.1993). The local graziers reported of sightings in Sibia chapori, Churke chapori, Sissoo-chapori and some other chaporis on the Brahmaputra and the Lohit rivers. The habitat in Amarapur where the floricans have been sighted is not of pure *Imperata cylindrica* but was mixed grassland with reeds like *Arundo donax* as the dominant species.

**Eurasian Curlew *Numenius arquata*** Only one sighting during the survey. A lone bird was flushed in Amarapur during a walk through the grassland on 22.xii.1993. The species is a rare passage migrant and winter visitor to Assam (Choudhury 2000).

**Spotted Redshank *Tringa erythropus*** An uncommon winter

visitor. Two lone birds were seen near Kolomy on 1.xi.1992 and a flock of 12 in a marsh, east of Dadhia with a few Black-winged Stilts *Himantopus himantopus* on 19.xii.1993. Three unidentified redshanks were seen near Rongmola on 8.xi.1992, which were also tentatively identified as *erythropus*.

**Spotted Greenshank *Tringa guttifer*** Endangered. Uncommon winter visitor with two sightings during the survey. A single bird was seen near Dighaltarang on the banks of the Dangori River on 21.ix.1993. It was in non-breeding plumage with its upper parts uniformly light grey-brown, breast and flanks white with no markings at all, the basal half of the bill was greenish-yellow while the remaining half horny-grey. Its tail looked entirely pale. Its bill looked slightly upturned. Two more birds were seen and photographed in a marsh beside the Dadhia River on 19.xii.1993.

**Pallas's Gull *Larus ichthyaetus*** A winter visitor as well as a passage migrant in the area. Although not common, a few birds were always seen along the Brahmaputra and the Lohit rivers in winter. Usually seen singly, but once two groups of six and 10 birds respectively, were seen resting on a shingle chapori of the Lohit River between Saikhowaghat and Sadiya on 20.xii.1992.

**Black-bellied Tern *Sterna acuticauda*** Near-threatened. Only two sightings: three birds in Rongmola on 8.ix.1992 and 10 (a group of eight and then two birds) in Motapung on 31.v.1993.

**Purple Wood-Pigeon *Columba punicea*** Vulnerable. This colourful pigeon is a rare resident of the park. Three sightings were made during my surveys; two birds in flight near Kolomi on 22.v.1993, and two single birds in flight (separately), east of Salbeel on 1.v.1994. The habitat was semi-evergreen forest and salix swamp. These sightings were very significant being the first in Assam since 1911 (Roonwal 1941), and first in north east India since 1946 (Ali & Ripley 1948). Subsequently, Kazmierczak & Allen (1997) also saw the birds in the park.

**Brown Fish-Owl *Ketupa zeylonensis*** Two birds were spotted perched in a tree c. 2 km upstream of Silikaguri on 13.ix.1996.

**Blyth's Kingfisher *Alcedo hercules*** Near-threatened. Only one bird positively identified between Dadhia and Ranighat on 19.xii.1993.

**Ruddy Kingfisher *Halcyon coromanda*** A rare species. Two sightings recorded, both in Salbeel; one in lower area on 1.v.1994 and the other in Upper Salbeel on 14.v.1994.

**Great Pied Hornbill *Buceros bicornis*** Near-threatened. Once common in most of Dibru-Saikhowa, as is evident from local reports and original habitat type—now it is seen in a few pockets like Tonkrong and Upper Salbeel where some evergreen forest is still present.

**White-throated Bulbul *Criniger flaveolus*** First heard in Dibru-Saikhowa at c. 110 m on 12.vii.1992. Then on every visit, I heard the species and also observed it on a few occasions. This was a new elevation record. Earlier, residential range of the bird was recorded as above 600 m and it occurred in the plains only during winter (Ali & Ripley 1987). Subsequently, this species was found to be a common resident throughout low evergreen and semi-evergreen forests in Assam.

**White-tailed Bushchat *Saxicola leucura*** Two sightings, both of single birds: in Churke chapori (1.iv.1994) and in Erasuti chapori, in the extreme western end of the park on 20.iii.1994.

**Jerdon's Bushchat *Saxicola jerdoni*** Four sightings, all of single birds: near Kolomy (1.xi.1992), in Salbeel (15.iii.1994), Upper

Salbeel (14.v.1994) and Silikaguri (13.ix.1996). The birds were in tall grass dominated by *Arundo donax*.

**Marsh Babbler *Pellorneum palustre*** Vulnerable. Restricted-range. A resident bird, long overlooked in areas such as Toralipathar, Paglipathar and Dighalipathar. Its call was heard during most of the visits to these sites in 1992–1994 but the caller could not be identified, as I did not have a recording at the time. I saw single birds, at least 10–12 times, moving down into dense grass with *Vetiveria zizanioides* and other species, on being approached, thus denying closer observation.

**Jerdon's Babbler *Chrysomma altirostre*** Vulnerable. A resident of elephant grass jungle with *Arundo donax* and *Saccharum* spp. I observed two to three birds, at least thrice in Amarpur (near Mingmung, 22.xii.1993). The next sighting was of more than three birds in Churke *chaponi* on 1.iv.1994. Initially I could not identify them from their calls, hence did not list them in Choudhury (1994). I confirmed these subsequently after cross-checking with Desmond Allen. Allen (2002) found them to be common in Amarpur area.

**Black-breasted Parrotbill *Paradoxornis flavirostris*** Vulnerable. Restricted-range. A resident of dense elephant grass dominated by *Arundo donax*, its sighting is not easy unless its call heard. Two birds were present along with Rufous-necked Laughingthrushes *Dryonastes ruficollis* in Amarpur (near Mingmung, 22.xii.1993). These sightings were very significant, being the first in Assam since 1911 (Stevens 1914, 1915a,b), and second in its entire range since 1911 (BirdLife 2001). It was heard in Salbeel and Kolomy on a number of other occasions. Allen (2002) later visited the site and also found the birds.

**Long-tailed Prinia *Prinia burnesii*** Near-threatened. I observed one in Lakhimpur locality in Amarpur on 21.xii.1993. This species was also recorded by later visitors to Dibru-Saikhowa. One seen and another heard in the park on 9.iii.1998 and then two seen with one heard on 11.iii.1998 (Hornbuckle *et al.* 1998).

**Finn's Weaver *Ploceus megarhynchus*** Vulnerable. A 'compact' flock (probably of >20) observed between Torali and Kolomy in June 1993 indicating possible breeding in the area. In almost all the field trips many such 'compact' flocks were encountered but detailed observation as well as identification was difficult as other weavers and munias also move in such flocks.

**Spot-winged Starling *Saroglossa spiloptera*** A wintering species, not very common. More than ten seen feeding on nectar of simul *Bombax ceiba* flowers near Kolomy camp (30.i.1994).

**Brahminy Starling *Sturnus pagodarum*** Only one sight record. A group of five to six birds was seen between Dadhia and Ranighat (19.xii.1993). The birds were basking on top of a shrub. This species is considered a straggler to Assam (Choudhury 2000).

**Bank Myna *Acridotheres ginginianus*** Very rare in Assam (Choudhury 2000). Known eastern limit was Pani-Dihing, Sivasagar district at 94°35'E (Choudhury 1991a). I saw a bird riding on a grazing cow near in the outskirts of Tinsukia town (14.ix.1993), c. 10 km from the park. This is a new eastern limit of the species (95°25'E). A lone bird was seen in Dighalipathar in November 2001.

**Great-tufted Myna *Acridotheres grandis*** First seen near Baluchar where six to seven mynas were attending grazing cattle on 26.ix.1993. Also seen elsewhere, mostly in pairs. This species has extended its range to the plains of Assam fairly recently (Ali & Ripley 1987, Choudhury 1991b).

**Grey Treepie *Dendrocitta formosae*** Seen in the well-wooded areas of the park. Many sightings, especially when they cross channels and clearings. This species was earlier known to occur above 600 m a.s.l. with marked summer–winter altitudinal movement (Ali & Ripley 1987). In Dibru-Saikhowa, during almost every visit, especially in summer, I saw these birds year round at 110–120 m a.s.l.; however, winter sightings were rare (only on a few occasions in February and November 1992). This was a new low elevation record for the species.

## Conservation

This was the first ever systematic survey of birds, as well as general wildlife, in Dibru-Saikhowa. The survey revealed that the park is an important sanctuary for many endangered species. Besides Kaziranga, no protected area hosts 24 Threatened bird species anywhere in India (Islam & Rahmani 2004).

Presence of two 'forest villages' in the core area, habitat destruction through expansion of agriculture, logging, clearance for settlement, and poisoning in the rivers and *beels* for fishing are major threats to Dibru-Saikhowa. Many of the villagers of 'forest villages' and of the fringe villages are engaged in tree felling and timber smuggling. Although there is no significant outside encroachment, the forest villagers of Laika and Dadhia are encroaching upon large areas adjacent to their villages. The notified areas of these villages were 238 and 135 ha respectively but they have cleared more areas on their own and these now cover not less than c. 500 and 300 ha respectively. There are more than 100 *khutis* (cattle and buffalo camps) in the fringe and in forest villages with >6,000 and >5,000 head of cattle and buffalo respectively. Heavy grazing has resulted in degradation of grassland.

Annual floods with periodic high-level flooding, and erosion by river / channels are major natural threats to the area. The normal flood (annual) submerges about three-fourths of the park while during the periodical high-level floods almost the entire area gets submerged. Erosion by the Brahmaputra and Lohit rivers has already taken away large chunk of grassland and woodland of the park. Because of higher flow through Kolomy and Salbeel rivers in recent years, these once narrow channels now resemble rivers and some good forest / grassland have been eroded away by them. A channel of the Lohit called the Ananta nullah has turned the park into a large riverine island. The park suffered immensely during the devastating floods of 1998. For example, prior to the flood, the width of the Dibru River at Guijan was around 100 m but now it is more than 300 m! Insufficient infrastructure, such as inadequate manpower and a weak anti-poaching network, is also a major conservation issue.

A well-defined 'core area', covering about 190 km<sup>2</sup>, should be designated—with no human disturbance—as recommended by Choudhury (1994). Currently, the entire park is disturbed by human activities. In addition, a satellite core area of 1.5 km<sup>2</sup> should be created in Amarpur (existing 'soil conservation' area) where Bengal Florican, Black-breasted



Parrotbill and Jerdon's Babbler occur.

The forest villages of Laika and Dadhia should be translocated out of the notified park area on a priority basis by providing an attractive package to the villagers. More anti-poaching camps are necessary to check / stop timber extraction, poaching and fishing by poisoning. Mobile camps on boats are also recommended. Awareness campaigns are necessary in the fringe villages. Ecotourism and provision of bio-gas, in lieu of wood, for fuel are also recommended.

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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*. Bombay: Oxford University Press.
- Ali, S. & Ripley, S.D. 1948. The birds of the Mishmi Hills. *J. Bombay Nat. Hist. Soc.* 48: 1-37.
- Allen, D. 2002. A bird survey of the Amarpur area of the Dibru-Saikhowa biosphere reserve, Assam, India. *Forktail* 18: 87-91.
- Baker, E.C.S. 1902. Occurrence of the 'Mandarin duck' in India. *J. Bombay Nat. Hist. Soc.* 14: 626-627.
- Baker, E.C.S. 1904. The occurrence of the Masked Fin-foot (*Heliopais personata*) in Lakhimpur. *J. Bombay Nat. Hist. Soc.* 16: 156.
- Baker, E.C.S. 1921. *Indian ducks and their allies*. 2<sup>nd</sup> ed. Bombay: Bombay Natural History Society.
- BirdLife International. 2001. *Threatened birds of Asia*. 2 vols. Cambridge: BirdLife International.
- BirdLife International. 2004. *Threatened birds of the world*. CD-ROM. Cambridge: BirdLife International.
- Chatterjee, S. 2004. North-east India trip report: 3-13<sup>th</sup> March 2004. Unpublished.
- Choudhury, A.U. 1991a. Bird observations from Sibsagar district, Assam, India. *Forktail* 6: 35-42.
- Choudhury, A.U. 1991b. New for Assam: the White-vented Myna. *OBC Bull.* 13: 20-23.
- Choudhury, A.U. 1993. A nesting site of the White-winged Wood Duck in Assam. *Threatened Waterfowl Research Group Newsletter* 3: 8.
- Choudhury, A.U. 1994a. A new Crane-migration route discovered. *Asian Wetland News* 7 (1): 18.
- Choudhury, A.U. 1994b. *A report on bird survey in Dibru-Saikhowa Wildlife Sanctuary, Assam, India*. Report to the Oriental Bird Club, U.K. 71 pp+maps.
- Choudhury, A.U. 1997. The status of the birds of Dibru-Saikhowa Sanctuary, Assam, India. *OBC Bull.* 25: 27-29.
- Choudhury, A.U. 1998. Mammals, birds and reptiles of Dibru-Saikhowa Sanctuary, Assam, India. *Oryx* 32 (3): 192-200.
- Choudhury, A.U. 2000. *The birds of Assam*. Guwahati: Gibbon Books & WWF-India.
- Choudhury, A.U., Lahkar, K. & Risebrough, R. 2005. *Survey and monitoring of nesting sites of Gyps vultures in Assam, India*. Guwahati: The Rhino Foundation for Nature NE India & Dept. of Enviro. & Forests, Govt of Assam. 49 pp.
- Das, R.K. 2006. Birds of Dibru-Saikhowa Biosphere Reserve. *Newsletter for Birdwatchers* 46 (1): 6-14.
- Das, R.K. & Das, S. 2006. Pied Avocet—a new record for Dibru-Saikhowa NP. *Newsletter for Birdwatchers* 46 (2): 29.
- Dryer, N. & Lobo, P. 2004. NE India: 06 Jan-21 Jan 2004. Unpublished trip report.
- Grimmett, R., Inskipp, C. & Inskipp, T. 1998. *Birds of the Indian subcontinent*. London: Christopher Helm.
- Hornbuckle, J., Allen, D., Holt, P. & Kazmierczak, K. 1998. Northeast India: 20 February-13 March 1998. Unpublished trip report.
- Islam, Z. & Rahmani, A.R. (eds.) 2004. *Important Bird Areas in India*. Mumbai & Cambridge: Bombay Natural History Society & BirdLife International.
- Kazmierczak, K. & Allen, D. 1997. A short ornithological survey of the Dibru-Saikhowa Wildlife Sanctuary. *Newsletter for Birdwatchers* 37 (5): 84-85.
- Kazmierczak, K. 2000. *A field guide to the birds of India*. New Delhi: OM Book Service.
- Myers, N., Mittermeier, R., Mittermeier, C., da Fonseca, G. & Kent, J. 2000. Biodiversity hotspots for conservation priorities. *Nature* 403: 853-858.
- Parsons, R.E. 1935. A second record of the occurrence of the Long-tailed Duck in India. *J. Bombay Nat. Hist. Soc.* 38: 193-194.
- Prasad, A. 2001. North-east India: 11 February-8 March 2001. Unpublished trip report.
- Rasmussen, P. & Anderton, J. 2005. *Birds of South Asia: The Ripley Guide*. 2 vols. Barcelona: Lynx Edicions.
- Roonwal, M.L. 1941. Catalogue of birds in the Indian Museum, Calcutta. I. Columbæ (pigeons and doves). *Rec. Indian Mus.* 43: 281-360.
- Sarmah, N. 1996. *Checklist—Dibru-Saikhowa wildlife sanctuary*. Tinsukia: M. Ahmed.
- Stattersfield, A. J., Crosby, M. J., Long, A. J. & Wege, D. C. 1998. *Endemic Bird Areas of the world: priorities for biodiversity conservation*. Cambridge: BirdLife International.
- Stevens, H. 1914. Notes on the birds of Upper Assam. Part I. *J. Bombay Nat. Hist. Soc.* 23 (2): 234-268.
- Stevens, H. 1915a. Notes on the birds of Upper Assam. Part II. *J. Bombay Nat. Hist. Soc.* 23 (3): 547-570.
- Stevens, H. 1915b. Notes on the birds of Upper Assam. Part II. *J. Bombay Nat. Hist. Soc.* 23 (4): 721-736.
- Talukdar, B., Barman, R., Bhattacharjee, P. & Sarmah, N. 1995. Storks of Dibru-Saikhowa sanctuary, Assam. *OBC Bull.* 22: 49-50.
- van der Wielen, P. 2006. Bird sightings in Assam and Meghalaya (India) in spring 2006 including a new species for the subcontinent. Unpublished trip note.
- Vermeulen, J. 2003. Report from [birdtours.co.uk](http://birdtours.co.uk): Northeast India, 20 February-9 March 2003. Unpublished trip report.



Red-capped Babbler ©Anwaruddin Choudhury

## Appendix 1

### Annotated checklist of birds recorded so far in Dibru-Saikhowa (national park and biosphere reserve) [See end for abbreviations]

#### Podicipedidae

Little Grebe *Tachybaptus Ruficollis* R,C  
Great Crested Grebe *Podiceps cristatus* W,U  
Black-necked Grebe *P. nigricollis* W,O

#### Pelecanidae

Spot-billed Pelican *Pelecanus philippensis* VU,R,L,U

#### Phalacrocoracidae

Little Cormorant *Phalacrocorax niger* R,C  
Indian Shag *P. fuscicollis* O  
Great Cormorant *P. carbo* W,C

#### Anhingidae

Darter *Anhinga melanogaster* NT,R,C

#### Ardeidae

Little Egret *Egretta garzetta* R,C  
Grey Heron *Ardea cinerea* R,C  
White-bellied Heron *A. insignis* EN,W,S  
Purple Heron *A. purpurea* R,U  
Large Egret *Casmerodius albus* R,C  
Median Egret *Mesophoyx intermedia* R,C  
Cattle Egret *Bubulcus ibis* R,C  
Indian Pond-Heron *Ardeola grayii* R,C  
Little Green Heron *Butorides striatus* R,C  
Black-crowned Night-Heron *Nycticorax nycticorax* R,C  
Malayan Night-Heron *Gorsachius melanolophus* R,U  
Yellow Bittern *Ixobrychus sinensis* R,U  
Chestnut Bittern *I. cinnamomeus* R,C  
Black Bittern *Dupetor flavicollis* R,U

#### Ciconiidae

Painted Stork *Mycteria leucocephala* NT,S (Choudhury 2000)  
Asian Openbill Stork *Anastomus oscitans* R,L,C  
Black Stork *Ciconia nigra* W,C  
White-necked Stork *C. episcopus* L,U  
European White Stork *C. ciconia* S  
Black-necked Stork *Ephippiorhynchus asiaticus* NT,R,L,U  
Lesser Adjutant-Stork *Leptoptilos javanicus* VU,RL,C  
Greater Adjutant-Stork *L. dubius* EN,L,U

#### Threskiornithidae

Glossy Ibis *Plegadis falcinellus* O  
Eurasian Spoonbill *Platalea leucorodia* S (Choudhury 2000)

#### Anatidae

Large Whistling-Duck *Dendrocygna bicolor* R,U  
Lesser Whistling-Duck *D. javanica* R,C  
Bean Goose *Anser indicus* W  
Three specimens obtained near

Dibrugarh, towards south-western corner of the reserve (Baker 1921).  
Greylag Goose *A. indicus* W,C  
Bar-headed Goose *A. indicus* W,U  
Red-breasted Goose *A. indicus* VU,W.  
Recorded near Dibrugarh, towards south-western corner of the reserve (Baker 1921).

Brahminy Shelduck *Tadorna ferruginea* W,C

Common Shelduck *T. tadorna* W,O

White-winged Duck *Cairina scutulata* EN,R,U

Cotton Teal *Nettapus coromandelianus* R,C  
Mandarin Duck *Aix galericulata* NT,W,S  
Near Rongagora Tea Estate (Baker 1902).

Gadwall *Anas strepera* W,C

Falcated Duck *A. falcata* W,U

Eurasian Wigeon *A. strepera* W,C

Mallard *A. platyrhynchos* W,C

Indian Spot-billed Duck *A. poecilorhyncha* R,W,C,U

Chinese Spot-billed Duck *A. zonorhyncha* W,U

Northern Shoveller *A. clypeata* W,C

Northern Pintail *A. acuta* W,C

Garganey *A. querquedula* W,U

Baikal Teal *A. formosa* VU,W,S

A male shot by A. E. Evans near Dibrugarh, towards south-western corner of the reserve in 1910 (Choudhury 2000).

Common Teal *A. crecca* W,U

Red-crested Pochard *Netta rufina* W,U

Common Pochard *Aythya ferina* W,U

Ferruginous Pochard *A. nyroca* NT,W,U

Baer's Pochard *A. nyroca* VU,W,U

Tufted Pochard *A. fuligula* W,U

Greater Scaup *A. marila* W,S

Recorded from near Dibrugarh, towards south-western corner of the reserve (Ali & Ripley 1987).

Long-tailed Duck *Clangula hyemalis* W,S

Shot from Brahmaputra River near Sadiya, towards north-eastern part of the reserve in 1935 (Parsons 1935).

Common Goldeneye *Bucephala clangula* W,S

Recorded from Sadiya, towards north-eastern part of the reserve in 1903 (Baker 1921).

Smew *Mergellus albellus* W,S

Recorded from north-eastern part of the reserve (Ali & Ripley 1987).

Common Merganser *Mergus merganser* W,U

#### Accipitridae

Jerdon's Baza *Aviceda jerdoni* SU,U

Black Baza *A. leuphotes* R,C

Oriental Honey-buzzard *Pernis ptilorhynchus* R,U

Black-shouldered Kite *Elanus caeruleus* R,L,U

Black Kite *Milvus migrans* R,C

Brahminy Kite *Haliastur indus* L,O

Pallas's Fish-Eagle *Haliaeetus leucoryphus* VU,W,U

White-tailed Sea-Eagle *H. albicilla* NT,W,O

Lesser Grey-headed Fish-Eagle

*Ichthyophaga humilis* NT,L,O

Greater Grey-headed Fish-Eagle *I. ichthyaeus* NT,R,C

Indian White-backed Vulture *Gyps bengalensis* CR,R,L,U

Slender-billed Vulture *G. tenuirostris* CR,R,L,U

Himalayan Griffon *G. himalayensis* W,C

Cinereous Vulture *Aegypius monachus* NT,W,O

Red-headed Vulture *Sarcogyps calvus* NT,L,O

Short-toed Snake-Eagle *Circaetus gallicus* L,U

Crested Serpent-Eagle *Spilornis cheela* R,C

Western Marsh-Harrier *Circus aeruginosus* W,U

Hen Harrier *C. cyaneus* W,U

Pied Harrier *C. melanoleucos* W,U

Crested Goshawk *Accipiter trivirgatus* R,U (Jan Vermeulen 2003)

Shikra *A. badius* R,C

Japanese Sparrowhawk *A. gularis* S. One obtained from Rongagora in 1901 (Stevens 1915).

Besra Sparrowhawk *A. virgatus* R,L,U

Eurasian Sparrowhawk *A. nisus* R,W,C

Common Buzzard *Buteo buteo* W,U

Black Eagle *Ictinaetus malayensis* L,U

Greater Spotted Eagle *Aquila clanga* VU,W,U

Bonelli's Eagle *Hieraaetus fasciatus* S

Rare in Assam with a handful of records (Choudhury 2000). Only record of the reserve was from

Motapung in July 1992.

Booted Eagle *Hieraaetus pennatus* W,O

Rufous-bellied Hawk-Eagle *Hieraaetus kienerii* L,U

Changeable Hawk-Eagle *Spizaetus cirrhatu* R,C

#### Pandionidae

Osprey *Pandion haliaetus* W,C

#### Falconidae

Pied Falconet *Microhierax melanoleucos* R,U

Lesser Kestrel *Falco naumanni* VU,P,U

Common Kestrel *Falco tinnunculus* W,C

Red-Headed Falcon *Falco chicquera* SU,U

Amur Falcon *Falco amurensis* P,O

Eurasian Hobby *Falco subbuteo* W,U  
(Manoj Nair, *in litt.*).  
Oriental Hobby *Falco severus* L,U  
Peregrine Falcon *Falco peregrinus* R,L,U

#### Phasianidae

Black Francolin *Francolinus francolinus* R,U  
Swamp Francolin *Francolinus gularis*  
VU,R,U  
Blue-breasted Quail *Coturnix chinensis*  
R,AU.  
Red Junglefowl *Gallus gallus* R,U  
Kaleej Pheasant *Lophura leucomelanos*  
*lathamii* R,U

#### Turnicidae

Small Buttonquail *Turnix sylvatica* R,AU.  
Yellow-legged Buttonquail *Turnix tanki*  
R,W,AU (Allen 2002).  
Common Buttonquail *Turnix suscitator*  
R,AU.

#### Gruidae

Sarus Crane *Grus antigone* VU,O.  
Common Crane *Grus grus* W,P,U

#### Rallidae

Brown Crake *Amaurornis akool* R,U  
White-breasted Waterhen *Amaurornis*  
*phenicurus* R,C  
Elwes's Crake *Porzana bicolor* R?U  
Ruddy-breasted Crake *P. fusca* R,U  
Watercock *Gallicrex cinerea* R,U  
Purple Moorhen *Porphyrio porphyrio* R,C  
Common Moorhen *Gallinula chloropus* R,C  
Common Coot *Fulica atra* W,U

#### Heliornithidae

Masked Finfoot *Heliopais personata*  
VU,R,L,U  
Recorded in Dighaltarang area of the  
reserve in July 1904 (Baker 1904).

#### Otididae

Bengal Florican *Houbaropsis bengalensis*  
EN,R,L,U

#### Jacaniidae

Pheasant-Tailed Jacana *Hydrophasianus*  
*chirurgus* R,C  
Bronze-Winged Jacana *Metopidius indicus*  
R,C

#### Rostratulidae

Greater Painted-Snipe *Rostratula*  
*benghalensis* R,AU.

#### Charadriidae

European Golden Plover *Pluvialis apricaria*  
W,P,S  
(Ali & Ripley 1987; Das & Das 2006).  
Pacific Golden Plover *P. fulva* W,C  
Long-billed Plover *Charadrius placidus*  
W,U  
Little Ringed Plover *C. dubius* R,W,C  
Kentish Plover *C. alexandrinus* W,U

Lesser Sand Plover *C. mongolus* W,P,U  
Northern Lapwing *Vanellus vanellus* W,C  
River Lapwing *V. duvaucelii* R,C  
Grey-headed Lapwing *V. cinereus* W,C  
Red-wattled Lapwing *V. indicus* R,C

#### Scolopacidae

Pintail Snipe *Gallinago stenura* W,C  
Common Snipe *G. gallinago* W,C  
Jack Snipe *Lymnocyrtus minimus* W,U  
(Das 2006)  
Bar-Tailed Godwit *Limosa lapponica* W,O  
(Das 2006)  
Whimbrel *Numenius phaeopus* W,U (Manoj  
Nair, *in litt.*)  
Eurasian Curlew *Numenius arquata* W, P,U  
Spotted Redshank *Tringa erythropus* W,U  
Common Redshank *T. totanus* W,C  
Marsh Sandpiper *T. stagnatilis* W,C  
Common Greenshank *T. nebularia* W,C  
Spotted Greenshank *T. guttifer* EN,W,U  
Green Sandpiper *T. ochropus* W,C  
Wood Sandpiper *T. glareola* W,C  
Common Sandpiper *Actitis hypoleucos*  
W,C  
Asian Dowitcher *Limnodromus*  
*semipalmatus* NT,W,P,S  
Recorded from near Dibrugarh,  
towards south-western corner of the  
reserve (Ali & Ripley 1987).  
Little Stint *Calidris minuta* W,U  
Temminck's Stint *C. temminckii* W,C  
Long-Toed Stint *C. subminuta* W,P,U

#### Recurvirostridae

Black-Winged Stilt *Himantopus himantopus*  
R,C  
Pied Avocet *Recurvirostra avocetta* W,P,O  
(Das & Das 2006).

#### Burhinidae

Stone-Curlew *Burhinus oedicephalus* R,AU.  
Great Stone-Plover *Esacus recurvirostris*  
R,AU.

#### Glareolidae

Small Pratincole *Glareola lactea* L,R,C

#### Laridae

Pallas's Gull *Larus ichthyaeus* W,P,U  
Brown-headed Gull *L. ichthyaeus* W,P,U  
Black-headed Gull *L. ridibundus* W,P,U  
River Tern *Sterna aurantia* R,C  
Black-bellied Tern *Sterna acuticauda*  
NT,R,U  
Whiskered Tern *Chlidonias hybridus* W,U

#### Columbidae

Blue Rock Pigeon *Columba livia* L,U  
Purple Wood-Pigeon *C. punicea* VU,R,U  
Oriental Turtle-Dove *Streptopelia orientalis*  
R,C  
Spotted Dove *S. chinensis* R,C  
Red Collared-Dove *S. tranquebarica* R,C  
Eurasian Collared-Dove *S. decacota* R,C  
Emerald Dove *Chalcophaps indica* R,C

Orange-Breasted Green-Pigeon *Treron*  
*bicincta* R,C

Pompadour Green-Pigeon *T. pompadora*  
R,C

Thick-Billed Green-Pigeon *T. curvirostra*  
R,C

Yellow-Footed Green-Pigeon *T.*  
*phoenicoptera* R,C

Pin-Tailed Green-Pigeon *T. apicauda* R,L,C

Wedge-Tailed Green-Pigeon *T. sphenura*  
R,L,C

Green Imperial-Pigeon *Ducula aenea* R,C

Mountain Imperial-Pigeon *D. badia* L,O

#### Psittacidae

Alexandrine Parakeet *Psittacula eupatria*  
R,U

Rose-ringed Parakeet *P. krameri* R,U

Red-breasted Parakeet *P. alexandri* R,C

#### Cuculidae

Pied Crested Cuckoo *Clamator jacobinus*  
M,U (Das 2006)

Red-winged Crested Cuckoo *C.*  
*coromandus* M,U

Large Hawk Cuckoo *Hierococcyx*  
*sparverioides* R,M

Brainfever Bird *Hierococcyx varius* R,C

Indian Cuckoo *Cuculus micropterus* R,L,C

Common Cuckoo *C. canorus* R(?), M,AU

Lesser Cuckoo *C. poliocephalus* R,M,AU

Banded Bay Cuckoo *Cacomantis sonneratii*  
R,L(?),O

Rufous-Bellied Plaintive Cuckoo *C.*  
*merulinus* R,M,C

Asian Emerald Cuckoo *Chrysococcyx*  
*maculatus* M,O (Das 2006)

Drongo Cuckoo *Surniculus lugubris* M,AU

Asian Koel *Eudynamis scolopacea* R,L,C

Large Green-Billed Malkoha  
*Phaenicophaeus tristis* R,C

Greater Coucal *Centropus sinensis* R,C

Lesser Coucal *C. bengalensis* R,C

#### Tytonidae

Barn Owl *Tyto alba* R,L,U

#### Strigidae

Oriental Scops Owl *Otus sunia* W,U  
(Manoj Nair, *in litt.*)

Brown Fish-Owl *Ketupa zeylonensis* R,U

Tawny Fish-Owl *K. flavipes* R,U

Collared Owlet *Glaucidium brodiei* R,U

Asian Barred Owlet *G. cuculoides* R,L,C

Jungle Owlet *G. radiatum* R?U

(Jan Vermeulen 2003).

Spotted Owlet *Athene brama* R,C

Brown Hawk-Owl *Ninox scutulata* R,C

Short-eared Owl *Asio flammeus* O (Das &  
Das 2006)

#### Caprimulgidae

Indian Jungle Nightjar *Caprimulgus indicus*  
R,L,C

Large-tailed Nightjar *C. macrurus* R,L,AU

**Apodidae**

Himalayan Swiftlet *Collocalia brevirostris* SU,U

In February 2001 (Prasad 2001).

White-throated Needletail-Swift

*Hirundapus caudacutus* S

(Manoj Nair, *in litt.*)

Asian Palm Swift *Cypsiurus balasiensis* R,C

Alpine Swift *Tachymarptis melba* O

(Manoj Nair, *in litt.*)

House Swift *Apus affinis* R,L,C

**Trogonidae**

Red-headed Trogon *Harpactes*

*erythrocephalus* R,U

**Alcedinidae**

Blyth's Kingfisher *Alcedo Hercules* NT,R,U

Small Blue Kingfisher *A. atthis* R,C

Blue-eared Kingfisher *A. meninting* R,U

Stork-billed Kingfisher *Halcyon capensis* R,C

Ruddy Kingfisher *Halcyon coromanda* SU,U

White-breasted Kingfisher *H. smyrnensis* R,C

Lesser Pied Kingfisher *Ceryle rudis* R,C

**Meropidae**

Blue-Bearded Bee-eater *Nyctornis*  
*athertoni* R,C

Small Green Bee-eater *Merops orientalis* R,C

Blue-Tailed Bee-eater *M. philippinus* M,U

Chestnut-Headed Bee-eater *M. leschenaulti* R,C

**Coraciidae**

Indian Roller *Coracias benghalensis* R,C

Oriental Broad-Billed Roller *Eurystomus*  
*orientalis* R,U

**Upupidae**

Common Hoopoe *Upupa epops* R,C

**Bucerotidae**

Oriental Pied Hornbill *Anthraceros*  
*albirostris* R,C

Great Pied Hornbill *Buceros bicornis* NT,R,L,U

**Capitonidae**

Lineated Barbet *Megalaima lineata* R,C

Blue-Throated Barbet *M. asiatica* R,C

Blue-Eared Barbet *M. australis* R,U

Coppersmith Barbet *M. haemacephala* R,C

**Picidae**

Eurasian Wryneck *Jynx torquilla* W,O One  
seen in march 2006 (van der Wielen  
2006)

Speckled Piculet *Picumnus innominatus* R,U

Rufous Piculet *Sasia ochracea* R,U

Grey-Capped Pygmy Woodpecker  
*Dendrocopos canicapillus* R,U

Fulvous-Breasted Pied Woodpecker *D.*  
*macei* R,C

Rufous Woodpecker *Celeus brachyurus*  
R,AU

Small Yellow-Naped Woodpecker *Picus*  
*chloropus* R,AU

Large Yellow-naped Woodpecker *P.*  
*flavinucha* R,U

Little Scaly-bellied Green Woodpecker *P.*  
*xanthopygaeus* R,C

Black-naped Green Woodpecker *P. canus*  
R,C

Lesser Golden-backed Woodpecker  
*Dinopium benghalense* R,AU

Greater Golden-backed Woodpecker  
*Chrysocolaptes lucidus* R,C

Pale-headed Woodpecker *Gecinulus*  
*grantia* R,AU

**Eurylaimidae**

Hodgson's Broadbill *Serilophus lunatus*  
R,U

Long-tailed Broadbill *Psarisomus dalhousiae*  
R,U

**Alaudidae**

Bengal Bush-Lark *Mirafra assamica* R,C

Indian Short-toed Lark *Calandrella raytal*  
R,AU

Eastern Skylark *Alauda gulgula* R,C

**Hirundinidae**

Sand Martin *Riparia riparia* R,L,U

Plain Martin *R. paludicola* R,C

Common Swallow *Hirundo rustica* R,W,C

**Motacillidae**

Forest Wagtail *Dendronanthus indicus*  
SU,O

White Wagtail *Motacilla alba* W,C

Citrine Wagtail *M. citreola* W,C

Yellow Wagtail *M. flava* W,C

Grey Wagtail *M. cinerea* W,C

Richard's Pipit *Anthus richardi* W,AU.

Paddyfield Pipit *A. rufulus* R,C

Oriental Tree Pipit *A. hodgsoni* W,C

Rosy Pipit *A. roseatus* W

**Campephagidae**

Large Cuckoo-Shrike *Coracina macei* R,C

Black-winged Cuckoo-Shrike *C.*  
*melaschistos* W,U

Rosy Minivet *Pericrocotus roseus* SU,O

Small Minivet *P. cinnamomeus* R,U

Long-tailed Minivet *P. ethologus* W,AU

Short-billed Minivet *P. brevirostris* W,U

Scarlet Minivet *P. flammus* R,C

Pied Flycatcher-Shrike *Hemipus picatus*  
R?,W,U

Large Woodshrike *Tephrodornis gularis*  
R,U

**Pycnonotidae**

Black-crested Yellow Bulbul *Pycnonotus*  
*melanicterus* R,U

Red-whiskered Bulbul *P. jocosus* R,C

Red-vented Bulbul *P. cafer* R,C

White-throated Bulbul *Alophoixus flaveolus*

R,L,C

Brown-eared Bulbul *Hemixos flavela* W,U

Black Bulbul *Hypsipetes leucocephalus* W,C

**Irenidae**

Common Iora *Aegithina tiphia* R,C

Jerdon's Chloropsis *Chloropsis*  
*cochinchinensis* R,C

Gold-fronted Leafbird *C. aurifrons* R,C

Asian Fairy-Bluebird *Irena puella* W,U

**Laniidae**

Brown Shrike *Lanius cristatus* W,C

Rufous-backed Shrike *L. schach* W,C

Grey-backed Shrike *L. tephronotus* W,C

**Turdinae**

Chestnut-bellied Rock-Thrush *Monticola*  
*rufiventris* W,O

Blue Rock-Thrush *M. solitarius* W,U

Blue Whistling-Thrush *Myophonus*  
*caeruleus* W,U

Orange-headed Thrush *Zoothera citrina*  
M,AU

Scaly Thrush *Z. dauma* W,U

Black-breasted Thrush *Turdus dissimilis*  
W,U

Grey-winged Blackbird *T. boulboul* W,O

Dark-throated Thrush *T. ruficollis* W,P,U

Lesser Shortwing *Brachypteryx leucophrys*  
W,O (Das 2006)

Himalayan Rubythroat *Luscinia pectoralis*  
W,U

Bluethroat *L. svecica* W,U

Oriental Magpie-Robin *Copsychus saularis*  
R,C

White-rumped Shama *C. malabaricus* R,C

Black Redstart *Phoenicurus ochruros* W,P,U

Hodgson's Redstart *P. hodgsoni* W,U

Daurian Redstart *P. aureus* W,C

Blue-fronted Redstart *P. frontalis* W,S (Jan  
Vermeulen 2003)

White-capped Redstart *Chaimarrornis*  
*leucocephalus* L,O

Plumbeous Water Redstart *Rhyacornis*  
*fuliginosus* L,O

White-tailed Robin *Myiomela leucura* W,U

Black-backed Forktail *Enicurus*  
*immaculatus* R,U

Common Stonechat *Saxicola torquata* W,C

White-tailed Stonechat *S. leucura* R,U

Jerdon's Bushchat *S. jerdoni* R,U

Grey Bushchat *S. ferrea* R,C

**Timaliinae**

Greater Necklaced Laughingthrush  
*Garrulax pectoralis* R,C

Rufous-necked Laughingthrush *G.*  
*ruficollis* R,C

Abbott's Babbler *Malacocincla abbotti* R,U

Spot-throated Babbler *Pellorneum*  
*albiventris* W,U

Marsh Babbler *P. palustre* VU,RR,R,C

Spotted Babbler *P. ruficeps* R,C

Hodgson's Scimitar Babbler *Pomatorhinus*  
*schisticeps* R,U



Lesser Scaly-breasted Wren-Babbler  
*Pnoepyga pusilla* W,U  
Rufous-fronted Babbler *Stachyris rufifrons*  
R,C  
Grey-throated Babbler *S. nigriceps* W,U  
Yellow-breasted Babbler *Macronous gularis*  
R,C  
Red-capped Babbler *Timalia pileata* R,C  
Yellow-eyed Babbler *Chrysomma sinense*  
R,C  
Jerdon's Babbler *C. altirostre* VU,R,U  
Striated Babbler *Turdoides earlei* R,C  
Slender-billed Babbler *T. longirostris*  
VU,R,U van der Wielen (2006)  
Nepal Tit-Babbler *Alcippe nipalensis* W,C  
White-bellied Yuhina *Yuhina zantholeuca*  
W,U (Prasad 2001)

#### Panurinae

Black-breasted Parrotbill *Paradoxornis*  
*flaviostris* VU,RR,R,U

#### Sylviinae

Streaked Fantail-Warbler *Cisticola juncidis*  
R,C  
Golden-headed Fantail-Warbler *C. exilis*  
R,AU  
Long-tailed Prinia *Prinia burnesii* NT,R,U  
Franklin's Prinia *P. hodgsonii* R,C  
Graceful Prinia *P. gracilis* R,U  
Seen 3-4 times in the *chaporis* with  
degraded grass (grazed by domestic  
stock) and *Tamarix dioica* shrubs off  
Laika (26.ix.1993) and in Kolia  
(1.iv.1994).

Yellow-bellied Prinia *P. flaviventris* R,C  
Plain Prinia *P. inornata* R,C  
Slaty-bellied Tesia *Tesia olivea* W,U  
Grey-bellied Tesia *T. cyaniventer* W,U  
Blanford's Bush-Warbler *Cettia pallidipes*  
W,O  
Brownish-flanked Bush-Warbler *C. fortipes*  
W,U  
Chestnut-crowned Bush-Warbler *C. major*  
W,U (Allen 2002)  
Aberrant Bush-Warbler *C. flavolivacea* W,O  
Grey-sided Bush-Warbler *C. brunnifrons*  
W,U  
Spotted Bush-Warbler *Bradypterus*  
*thoracicus* W (Prasad 2001,  
Hornbuckle *et al.* 1998)  
Paddyfield Warbler *Acrocephalus agricola*  
W,C  
Blunt-winged Warbler *A. concinens* W,AU  
Blyth's Reed Warbler *A. dumetorum* W,AU  
Indian Great Reed Warbler *A. stentoreus*  
W,U  
Thick-billed Warbler *A. aedon* W,U  
(Chatterjee 2004)  
Mountain Tailorbird *Orthotomus cuculatus*  
L O (Hornbuckle *et al.* 1998)  
Common Tailorbird *O. sutorius* R,C  
Common Chiffchaff *Phylloscopus collybita*  
W,O (Hornbuckle *et al.* 1998)  
Dusky Warbler *P. fuscatus* W,C

Smoky Warbler *P. fuligiventer* W,U  
Tickell's Leaf Warbler *P. affinis* W,C  
Grey-faced Warbler *P. maculipennis* W,U  
(Dryer & Lobo 2004)  
Yellow-browed Warbler *P. inornatus* W,U  
Hume's Warbler *P. humei* W,U (Manoj  
Nair, *in litt.*)  
Greenish Warbler *P. trochiloides* W,U  
Blyth's Leaf-Warbler *P. reguloides* W,AU  
Eastern Crowned Warbler *P. coronatus*  
W,U  
Black-Browed Leaf-Warbler *P. cantator*  
W,U (Dryer & Lobo 2004)  
Gold-spectacled Flycatcher-Warbler  
*Seicercus burkii* W,U  
Grey-headed Flycatcher-Warbler *S.*  
*xanthoschistos* W,O  
White-spectacled Flycatcher-Warbler *S.*  
*affinis* W,O  
Chestnut-crowned Flycatcher-Warbler *S.*  
*castaniceps* W,O  
Rufous-faced Flycatcher-Warbler  
*Abroscopus albogularis* W,U  
(Hornbuckle *et al.* 1998)  
Yellow-bellied Flycatcher-Warbler *A.*  
*superciliaris* W,U (Hornbuckle *et al.*  
1998)  
Striated Marsh-Warbler *Megalurus*  
*palustris* R,C  
Rufous-rumped Grass-Warbler  
*Graminicola bengalensis* NT,R,U  
Two sightings of lone birds at  
Dighalipathar in November 2001. The  
habitat was grassland with  
waterbodies around.  
Common Lesser Whitethroat *Sylvia*  
*curruca* W,O (Hornbuckle *et al.* 1998)

#### Muscicapinae

Red-throated Flycatcher *Ficedula parva*  
W,C  
Little Pied Flycatcher *F. westermanni* L,U  
Slaty-blue Flycatcher *F. tricolor* W,U  
Sapphire Flycatcher *F. sapphira* R?,W?U  
Verditer Flycatcher *Eumyias thalassina*  
W,C  
Large Niltava *Niltava grandis* W,U  
Small Niltava *N. macgrigoriae* W,C  
Rufous-bellied Niltava *N. sundara* W,U  
Brook's Flycatcher *Cyornis poliogenys*  
L,W,U  
Pale Blue Flycatcher *C. (Muscicapa)*  
*unicolor* SU,U  
Grey-headed Flycatcher *Culicicapa*  
*ceylonensis* W,C

#### Monarchinae

Black-naped Monarch-Flycatcher  
*Hypothymis azurea* R,L,C

#### Rhipidurinae

White-throated Fantail *Rhipidura albicollis*  
R,C  
[White-browed Fantail *R. aureola* listed by  
Allen (2002) was in all probability *R.*  
*albicollis*]

#### Paridae

Great Tit *Parus major* R,C  
Sultan Tit *Melanochlora sultanea* R,C

#### Sittidae

Chestnut-bellied Nuthatch *Sitta castanea*  
R,C  
Velvet-fronted Nuthatch *S. frontalis* R,U  
Wallcreeper *Tichodroma muraria* W,S (Das  
2006)

#### Dicaeidae

Tickell's Flowerpecker *Dicaeum*  
*erythrorhynchos* R,AU  
Plain Flowerpecker *D. concolor* R,C  
Scarlet-backed Flowerpecker *D.*  
*cruentatum* R,C

#### Nectariniidae

Ruby-cheeked Sunbird *Anthreptes*  
*singalensis* R,U  
Purple Sunbird *Nectarinia asiatica* R,U  
Black-throated Sunbird *Aethopyga saturata*  
R,L,W,U  
Crimson Sunbird *A. siparaja* R,L,C  
Streaked Spiderhunter *Arachnothera magna*  
W,C

#### Zosteropidae

Oriental White-eye *Zosterops palpebrosus*  
R,C

#### Emberizinae

Little Bunting *Emberiza pusilla* W,C  
Yellow-breasted Bunting *E. aureola* W,C  
Black-faced Bunting *E. spodocephala* W,C

#### Estrildidae

Red Munia *Amandava amandava* SU,O  
White-rumped Munia *Lonchura striata* R,C  
Spotted Munia *L. punctulata* R,C  
Black-headed Munia *L. malacca* R,C

#### Passerinae

House Sparrow *Passer domesticus* R,C  
Eurasian Tree Sparrow *P. montanus* R,C

#### Ploceinae

Black-breasted Weaver *Ploceus*  
*benghalensis* R,C  
Streaked Weaver *P. manyar* R,C  
Baya Weaver *P. philippinus* R,C  
Finn's Weaver *P. megarhynchus* VU,R?L,U

#### Sturnidae

Spot-winged Starling *Saroglossa spiloptera*  
W,U  
Grey-headed Starling *Sturnus malabaricus*  
R,C  
Brahminy Starling *S. pagodarum* SU,O  
Common Starling *S. vulgaris* W,O (Allen  
2002)  
Asian Pied Starling *S. contra* R,C  
Common Myna *Acridotheres tristis* R,C  
Bank Myna *A. ginginianus* O

Jungle Myna *A. fuscus* R,C  
Great-tufted Myna *A. cinereus* R,U  
Common Hill Myna *Gracula religiosa* R,C

#### Oriolidae

Black-headed Oriole *Oriolus xanthornus* R,C  
Maroon Oriole *O. traillii* R,C

#### Dicruridae

Black Drongo *Dicrurus macrocercus* R,C  
Ashy Drongo *D. leucophaeus* R,L,U  
Bronzed Drongo *D. aeneus* R,C  
Lesser Racket-tailed Drongo *D. remifer* R,U  
(Hornbuckle *et al.* 1998)  
Spangled Drongo *D. hottentottus* R,C  
Greater Racket-tailed Drongo *D. paradiseus* R,C

#### Artamidae

Ashy Woodswallow *Artamus fuscus* R,C

#### Corvidae

Common Green Magpie *Cissa chinensis* R,C  
Indian Treepie *Dendrocitta vagabunda* R,C  
Grey Treepie *D. formosae* L,W,C  
House Crow *Corvus splendens* R,C  
Jungle Crow *C. macrorhynchos* R,C

#### Threatened status:

CR=Critical.  
EN=Endangered.  
NT=Near-threatened.  
RR=Restricted-range.  
VU=Vulnerable.

#### Status:

L=local movement.  
M= migrant including summer and breeding visitors.  
P=passage migrant.  
R=resident.  
SU=status unclear.  
W=winter visitor.

#### Abundance:

AU=abundance unclear.  
C=common (seen in large numbers, or small numbers on a regular basis round the year or during their season of occurrence).  
O=occasional.  
S=stray or vagrant.  
U=uncommon (small numbers seen infrequently).

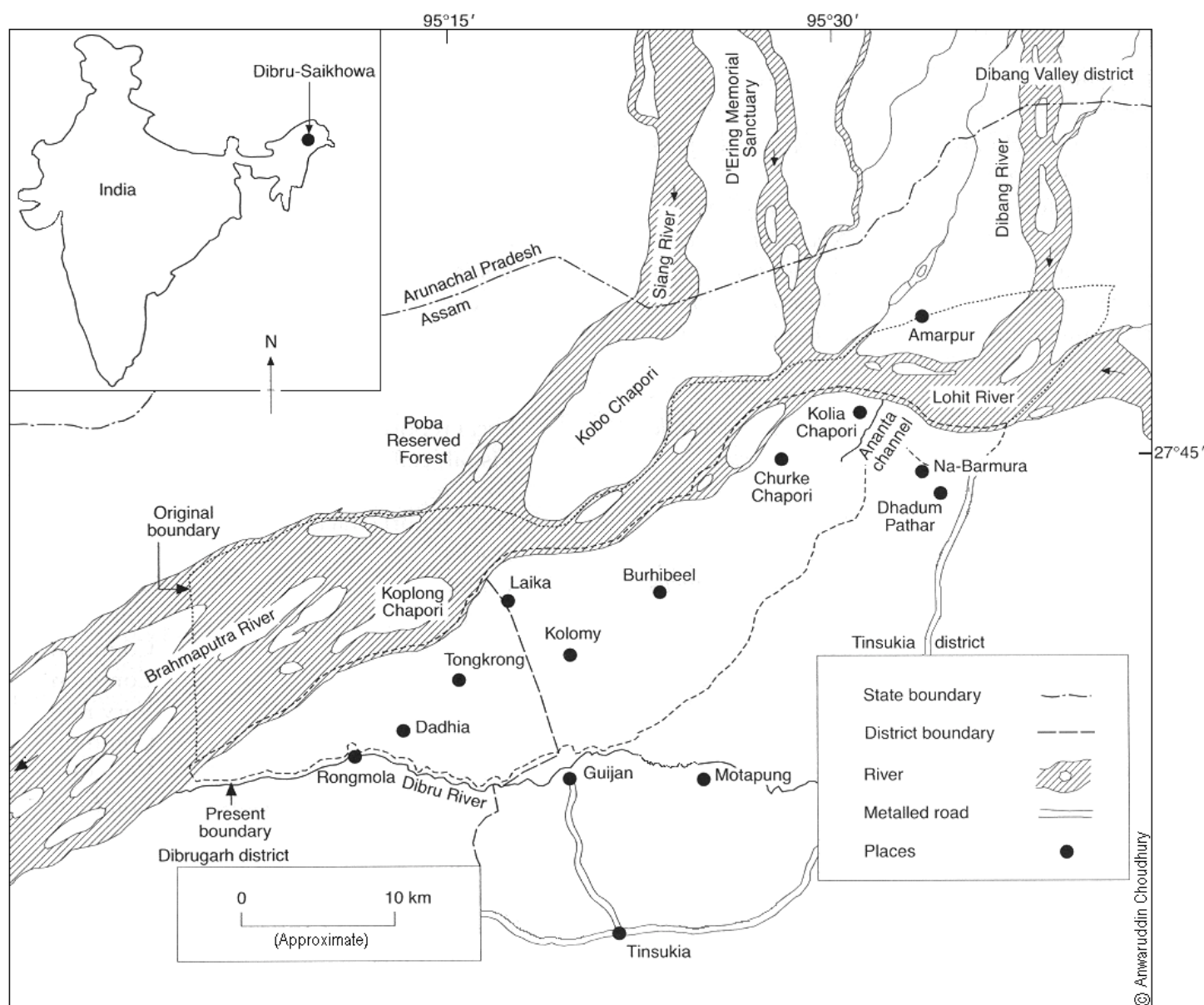


Fig.1. map showing Dibru-Saikhowa national park (shown as present boundary). Biosphere Reserve includes original boundary and fringe villages as buffer.

# Records of some rare birds from Farakka Barrage (West Bengal, India)

Samiran Jha

Jha, S. 2006. Records of some rare birds from Farakka Barrage (West Bengal, India). *Indian Birds* 2 (4): 106.

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**T**he increasing instances of reclamation and conversion of wetlands into agricultural fields, industry, mines and dams have made wetlands one of the most threatened habitats in India. This in turn has affected many wetland-dependent birds and nearly 29 species of water dependent birds in India are threatened with extinction (Islam & Rahmani 2002). Due to expansion of agriculture, species like Sarus Crane *Grus antigone*, which was common in almost all parts of the country only a century ago, have been reduced to small isolated pockets in north and north-western India (Gopi Sundar 2001).

However with the disappearance of natural wetlands, several artificial wetlands have become important for the conservation of waterbirds (Mischenko 2002). Indian sub-continental examples of such wetlands that are wintering sites for globally threatened species are Pong Dam in Himachal Pradesh, Kosi Barrage in Nepal and Chasma Barrage in Pakistan. In West Bengal too natural wetlands are under severe threat. Some artificial wetlands like Durgapur Barrage have traditionally been an important site for wintering waterbirds (Gauntlett 1972). The Farakka Barrage and adjoining area on Ganges River in Malda district (West Bengal) is a major wintering site for thousands of migratory waterbirds and has been designated as an Important Bird Area (IBA) by BirdLife International (Islam & Rahmani 2004). A list of birds of the area is available from the author on request. Notes on some of the rarer visitors to Farakka Barrage are given below.

**Darter *Anhinga melanogaster* (NT):** One or two birds are regularly seen near the barrage during winter.

**Black-necked Stork *Ephippiorhynchus asiaticus* (NT):** On 3.xi.2005 a pair was seen flying over the barrage. On 12.ii.2006, Subhasish Sengupta, Sandip Mandal and Bibhash Sarkar saw a pair in the Ash Pond of Farakka Thermal Power Project and again on 19.ii.2006 the same pair was observed by all of us in the same area. This stork has not been recorded from central West Bengal earlier. They are rare in the foothills of extreme northern West Bengal.

**Lesser Adjutant-Stork *Leptoptilos javanicus* (VU):** Uncommon on the banks, but seen singly and in pair in rare cases, generally during winter. Some local people claim that these birds breed sometimes in large *Ficus* trees along the river. One colony was located 2 km east of Ganges River in 1993 (Jha 1998). But that site is about 40 km north-west of the main barrage.

**Oriental White Ibis *Threskiornis melanocephala* (NT):** Rare resident, seen mainly during winter. Three birds were recorded near Gopalpur on 12.i.1991, seven near Tola Mandal on 25.xii.1993 and eight near Tofi on 25.xii.2004.

**Ferruginous Pochard *Aythya nyroca* (NT):** Common winter visitor, present in small numbers, which seem to have

increased in recent times.

**Baer's Pochard *Aythya baeri* (VU):** Rare winter migrant, seen in small numbers along with the common Ferruginous Pochard.

**Pallas's Fish-Eagle *Haliaeetus leucoryphus* (VU):** Rarely seen in Ganges River. One bird was sighted on 21.xi.1992 near Farakka forest, which is 2 km upstream of the main barrage.

**Greater Spotted Eagle *Aquila clanga* (VU):** Uncommon winter visitor, generally found singly, perched atop trees close to the river or an oxbow lake. One bird was sighted near Farakka forest on 28.i.2003.

**Black-bellied Tern *Sterna acuticauda* (NT):** Rare local migrant. 23 birds were sighted near Farakka barrage on 23.xii.1994.

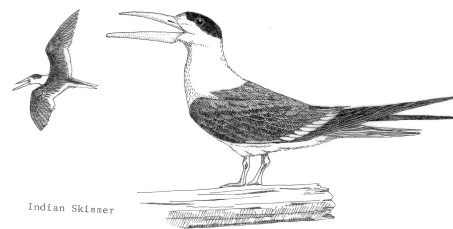
**Indian Skimmer *Rynchops albigollis* (VU):** Regular winter migrant or passage migrant in small numbers. Generally seen from early November to late December when sandbars (locally known as "chaurs") emerge. Rare from late January to late February. Seven birds were spotted near Manikchak Ghat on 7.ii.1991. Four near Gopalpur on 27.xii.1995. Nine on 31.i.1997, 23 on 1.xi.1998. 20 birds were seen on 11.xi.1999 and 14.xi.1999 near Farakka Barrage.

## Acknowledgements

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## References

- Gauntlett, F.M. 1972. Durgapur Barrage as a waterbird habitat. *J. Bombay Nat. Hist. Soc.* 68 (3): 619-632.
- Gopi Sundar, K.S. 2001. Where the Sarus Duet. *Sanctuary Asia*. 21 (5): 62-67.
- Islam, M.Z. & Rahmani, A.R. 2002. The threatened birds of India. *Buceros* 7 (1&2) pp. iii-x, 1-102.
- Islam, M.Z. & Rahmani, A.R. 2004. *Important Bird Areas in India: Priority sites for conservation*. Mumbai & UK: Indian Bird Conservation Network B.N.H.S. and BirdLife International.
- Jha, S. 1998. A note on the breeding distribution of Lesser Adjutant *Leptoptilos javanicus*. *Newsl. Birdwatchers* 38 (4): 71.
- Mischenko, A.L. 2002. The importance of artificial wetlands for conservation of bird species diversity in central Russia. 130-133. In: *Birds of wetlands & grasslands: Proceedings of the Salim Ali Centenary Seminar on conservation of avifauna of wetlands & grasslands*. Eds. Rahmani, A.R. & Ugra, G. Mumbai: Bombay Natural History Society.





## Eurasian Sparrowhawk *Accipiter nisus* in Kachchh, Gujarat, India

J.K. Tiwari, S.N. Varu & A.O. Langa

Tiwari, J.K., Varu, S.N. & Langa, A.O. 2006. Eurasian Sparrowhawk *Accipiter nisus* in Kachchh, Gujarat, India. *Indian Birds* 2 (4): 107.  
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Recent ornithological literature (Grimmett *et al.* 1998, Kazmierczak 2000, Rasmussen & Anderton 2005) does not record the Eurasian Sparrowhawk *Accipiter nisus* from the Kachchh district of Gujarat. Ali (1945) did not come across it during his ornithological surveys of Kachchh in 1943 and 1944. Stoliczka (1872) however, listed it from Kachchh. Roberts (1992) mentions that *A. n. nisosimilis* is a regular winter visitor to Sind, which is adjacent to Kachchh. During the BNHS field studies on the avifauna of Kachchh (1990-1995) we did not come across the Eurasian Sparrowhawk (Hussain 1991, Javed & Rahmani 1993).

On 21.ii.2006, in the Lala Bustard Sanctuary area of Abdasa, Kachchh, the first author (JKT) came across a Eurasian Sparrowhawk feeding on a Spiny-tailed Lizard *Uromastix hardwickii*. A photograph was taken by his colleagues (Avi and Inbal). This is the first photographic record of the species from Kachchh.

The identification was confirmed and other birdwatchers were contacted in Kachchh. The second (SNV) and third (AOL) authors confirmed having seen this species earlier in Kachchh. On 11.ii.1990, SNV had seen the Eurasian Sparrowhawk in the Tappar Dam area in Anjar taluka of Kachchh. On

19.xi.1994 AOL saw this species at Tera village in Abdasa taluka of Kachchh.

These records from Kachchh indicate that the Eurasian Sparrowhawk is a regular wintering bird to Kachchh desert.

### References

- Ali, S. 1945. *The birds of Kutch*. Kutch: Oxford University Press.  
Grimmett, R., C. Inskipp & T. Inskipp. 1998. *Birds of the Indian Subcontinent*. 1st ed. London: Christopher Helm, A & C Black.  
Hussain, S.A. 1991. *Bird migration project*. Bombay: Bombay Natural History Society.  
Javed, S. & Rahmani, A.R. 1993. *Ecology of the grasslands of Indian plains with special reference to their fauna*. Bombay: Bombay Natural History Society.  
Kazmierczak, K. 2000. *A field guide to the birds of India, Sri Lanka, Pakistan, Bhutan, Bangladesh, and Maldives*. Mountfield: Pica Press.  
Rasmussen, P.C. & Anderton, J.C. 2005. *Birds of South Asia. The Ripley's guide*. 2 vols. Washington D.C. & Barcelona: Smithsonian Institution & Lynx Edicions.  
Roberts, T.J. 1992. *The birds of Pakistan. Passeriformes. Pittas to Buntings*. Vol. 2. Karachi: Oxford University Press.  
Stoliczka, F. 1872. Notice of the Mammals and Birds inhabiting Kachh [Cutch]. *Journal of the Asiatic Society of Bengal* XLI (Part II No CLXXVII): 211-258.

## Prolonged breeding period of Greater Painted-Snipe *Rostratula benghalensis*

Arun M. K. Bharos

Bharos, A.M.K. 2006. Prolonged breeding period of Greater Painted-Snipe *Rostratula benghalensis*. *Indian Birds* 2 (4): 107.  
Arun M.K. Bharos, B-101 Gayatrinagar, P. O. Shankarnagar, Raipur C. G. 492007, India.

The Greater Painted-Snipe *Rostratula benghalensis* is irregularly seen in marshy patches, behind our residence at Raipur (Chhattisgarh). It is more regular when rain water accumulates in these marshes and thick shrubby vegetation grows up.

Frequent sightings of the species made me suspicious about its possible breeding in the region. This was confirmed on 6.iii.1999, when a pair with three sub-adult chicks was seen in the vicinity of the drying muddy patches. This family, which stayed in the locality for three days, was photographed.

The pair was back (or was it another?) in July 2000, and was seen till the first week of September 2000, thereafter only female could be seen till first week of October. Then on 6.x.2000, a male was seen with one week-old chick. This chick always stayed close to the parent and mostly kept itself under the shrubby vegetation cover. By 11.x.2000 the chick was quite precocious. Whenever any intruder was noticed, both birds froze for up to ten minutes. This family was seen till 16.x.2000,

when the marshes were drained for fish, which badly disturbed the vegetation cover. After this only the male was seen.

A pair re-appeared in May 2001 for few days and then left the locality, only to re-appear on 14.xi.2001. In the interlude most of the marshy area has been reclaimed for housing development, depriving the aquatic birds of their habitat. However the presence of adults in the remaining marshes is being recorded throughout the year in this locality.

The sighting of about a month-old chick in March and another chick in October suggests that the species has a prolonged or possibly repeated breeding here, even beyond the known normal period of July to September (Ali & Ripley 1989).

### Reference

- Ali, S. & Ripley, S.D. 1989. *Compact handbook of the birds of India and Pakistan including those of Bangladesh, Nepal, Bhutan and Sri Lanka*. New Delhi: Oxford University Press.

## Unusual nests of Red-rumped Swallow *Hirundo daurica* in Ratnagiri district (Maharashtra, India)

Sachin Balkrishna Palkar

Palkar, S.B. 2006. Unusual nests of Red-rumped Swallow *Hirundo daurica* in Ratnagiri district (Maharashtra, India). *Indian Birds* 2 (4): 108. Sachin Balkrishna Palkar, Sahyadri Nisarga Mitra, Near Laxminarayan Temple, Chiplun, Ratnagiri district, Maharashtra 415605, India.

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**R**ed-rumped Swallows *Hirundo daurica* construct a retort-shaped nest with mud. Both sexes take part in this construct. They collect pellets of wet mud in their beaks and stick these to the roof of a veranda, temple, under a bridge, etc. First they make a retort-shaped outline of the nest and then paste mud pellets, a pellet at a time, to make an egg chamber. After that the birds make an entrance tunnel. The outer surface of the nest is rough. After completing construction, they give a soft lining of fine grass, twigs and feathers to the egg chamber.

We give below two observations on unusual nests from Chiplun city (17°31'N 73°31'E) and Pimpali village.

### Chiplun

Vindhyawasini is a famous Hindu temple in Chiplun. Here a pair of Red-rumped Swallows regularly builds a nest attached to the roof of the temple and someone frequently breaks the nest. The birds rebuild it at the same place.

On 23.vi.2004 we observed that the nest had been completely broken. Only a mud outline remained and two hatchlings lay dead on the ground. Both adult birds were wandering around the place.

On 7.vii.2004 we observed a very unusual nest of at the same place. It had two entrances at opposite sides. The normal-sized nest was shaped like the "head of a bison". After an hour's observation we realized that both birds were busy lining the nest. They used only one tunnel for entering and leaving it. Later we climbed up to the nest and saw that one tunnel was blocked on the inside.

### Pimpali

Pimpali is a small village 8 km from Chiplun. Here Red-rumped Swallows *Hirundo daurica* had attached their nest to the roof of the "Gramdevata" temple, which was under renovation. During painting, the painters started to break the nest. Mr Jayant Kanade (President of Sahyadri Nisarga Mitra), who is a resident of Pimpali, advised them not to break the nest but to paint over it. The roof was painted white as was the nest. Now the nest was fully 'camouflaged'. Both birds accepted their painted over nest and used it for three years! In 2004 they built a new nest, attaching it to the coloured one.



Unusual nest of Red-rumped Swallow *Hirundo daurica* in Vindhyawasini (Chiplun).

## White-backed Vultures *Gyps bengalensis* in Gujarat

Amit B. Jethva

Jethva, A.B. 2006. White-backed Vultures *Gyps bengalensis* in Gujarat. *Indian Birds* 2 (4): 108–109.

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**W**ould like to place on record some observations, of vultures, made in 2004 in Gujarat. Near Mahuva, Bhavnagar district, a few farms with coconut plantations, had about 125–140 roosting White-backed Vultures *Gyps bengalensis*. I was told that about 50 nests were present during the breeding season. Local farmers recalled a larger number of roosting birds. They said that about eight years ago there was a high rate of mortality among the birds.

These birds faced several threats. Apparently their presence reduced the production of coconuts and spoilt the

palm fronds. The birds were constantly disturbed by people, who not only threw stones at them, but also used firearms to scare and even kill the birds.

The nesting birds were also threatened by egg collectors. Vulture eggs are in demand locally as a cure for tuberculosis and asthma.

Advocacy for the protection of vultures, among the coconut farmers, has educated them to the extent that they have agreed not to harass roosting birds nor disturb those nesting.

At Chhapariyali village, near Mahuva, a charitable asylum is run by a 'mahajan' of the Jain sect, for crippled, weak or 'useless' beasts, and shelters over 3,000 head of cattle. Dead animals are skinned and the carcass disposed in an open area. More than 500 White-backed Vultures were seen there. Large numbers of these birds were also seen at Nagla village in Mahuva taluk. This area is home to about 50 Asiatic lion *Panthera leo*, whose abandoned kills are another source of food for vultures.

We also found colonies of White-backed Vultures near Hanuman Gala and Banej-Jambudi near Gir. A Red-headed Vulture *Sarcogyps calvus* was seen here and the local people informed us that it nested in the region. During a tour of Surat district, I spotted 175–200 vultures at the Surat Panjarapol Trust garbage dumps at Akhakhhol and Tharoli. Most of these were White-backed Vultures but some were Long-billed Vultures *G. indicus*. Importantly, 15–20% of these were juveniles.

## Prevalence of HPAI H5N1 virus in wild birds

Taej Mundkur<sup>1</sup>

Mundkur, T. 2006. Prevalence of HPAI H5N1 virus in wild birds. *Indian Birds* 2 (4): 109–110.

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A major outbreak of highly pathogenic avian influenza (HPAI) strain H5N1 in Barheaded Geese *Anser indicus* and other nesting waterbird species in Qinghai Lake in China in May–July 2005 is reported to have killed over 6,500 birds. This outbreak marks only the second time in history that wild birds are being infected in any numbers by HPAI and marks a turning point in our understanding of the ability of HPAI to kill wild birds. This H5N1 virus was first reported in 1997 when it caused the deaths of six people in Hong Kong SAR and links to poultry led to wide-scale culling operations to contain the virus. In the subsequent years, singles or small numbers of mainly captive, peri-domestic birds and birds that feed in the vicinity of inhabitation or farmland in Hong Kong, elsewhere in southern East China and South East Asia were reported. Since the outbreak in mid 2005, over 45 species in Asia and Europe that have been found moribund or dead have tested positive to this virus.

A review of food and feeding habits of the birds reveals three main groups being infected: (a) flocking and colonial nesting species that feed or rest in wetlands or near farmland (e.g. Mute Swan *Cygnus olor*, Whooper Swan *Cygnus cygnus*, Mallard *Anas platyrhynchos*, Coot *Fulica atra*, Common Pochard *Aythya ferina*, Tufted Duck *Aythya fuligula*, Grey Heron *Ardea cinerea*, Great Crested Grebe *Podiceps cristatus*, Great Cormorant *Phalacrocorax carbo*, Bar-headed Goose, Greater Scaup *Aythya marila*, Barnacle goose *Branta leucopsis*, Goosander *Mergus merganser*, Ruddy Shelduck *Tadorna ferruginea*, Asian Openbilled Stork *Anastomus oscitans*, Pallas's Gull *Larus ichthyæetus* and Brownheaded Gull *Larus brunnicephalus*), (b) species that feed and scavenge on land and waterways near farms, villages and towns (e.g. Feral pigeon *Columba livia*, Largebilled Crow *Corvus macrorhynchos*, Magpie *Pica pica*, Grey Heron, Kestrel *Falco tinnunculus* and Scaly-breasted Munia *Lonchura punctulata*), and (c) predatory/scavenging species (e.g. Buzzard *Buteo buteo*, Peregrine Falcon *Falco peregrinus* and Largebilled Crow). A wide variety of captive birds have been affected have picked up the virus and would have been fed infected food or may from infected birds in the collections. While both resident and migratory birds are

falling victim to the virus, a predominance of migrants has been observed to date. At least few species such as swans appear to be more susceptible to the virus; outbreaks in these species across parts of Europe are believed to be in response to exceptionally cold weather driving birds to these regions, although the source of the virus infecting these birds across their range is not clear.

The H5N1 virus has been isolated only from a very small proportion of dead or moribund wild birds to date. Wide scale sampling of apparently healthy wild birds in Asian, African & European countries has so far not revealed the virus. The sole exception is of six ducks of 13,000 wild birds in China, within bird flu infested provinces. This suggests that the virus is highly lethal and that infected birds may not be capable of long distance migration. However samples sizes to date are very small and with the exception of the Iceland Whooper Swan, only a tiny fraction of any biogeographic population has been sampled, highlighting the need for comprehensive surveillance. Concern of HPAI has increased the reporting of dead wild birds and has helped to improve our understanding of the wide range of such deaths, including due to bacterial and viral diseases, intentional or accidental poisoning and inclement weather.

Ongoing experimental work on testing of susceptibility of the H5N1 in Mallard and few other species has revealed that while some birds die, others survive and shed virus for a few weeks and during this time can infect other individuals of the species. How these results correlates to birds in the wild and the ability of birds to carry this virus over long distances not known and needs to be investigated.

Information on results of surveillance of wild birds has been slow to become available to the public and is preventing timely epidemiological studies that are urgently needed to assist with risk assessments. Formal national reporting to OIE on wild birds is often still inadequate and incomplete on the identity or age of species to support epidemiological studies. For example, reports made in Feb–March 2006 cover 157 outbreaks, of which only in 70 (45%) species identified to species level and as a consequence the majority of information is not usable.

As wild birds are often implicated as a major vector in

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the spread of the disease, it is a high priority to improve our understanding of the precise migratory patterns and phenology of different species, enhance viral surveillance of wild birds in all countries and increase our knowledge on the behaviour of this virus in different wild birds. Such work will require considerable long term resource allocations to support strategic planning and coordination at the flyway and national level, building of capacity at the national level to undertake and report on progress in a timely manner. This

information will provide the basis for a much needed early warning system.

Further details can be obtained at: [www.cms.int/avianflu](http://www.cms.int/avianflu) and [www.iisd.ca/ymb/ais/ymbvol123num1e.html](http://www.iisd.ca/ymb/ais/ymbvol123num1e.html).

[This note is a summary of a presentation made by the author at the "Scientific Seminar on Avian Influenza, the Environment and Migratory Birds" UNEP HQ, Gigiri, Nairobi, Kenya, 10–11 April 2006, organised by UNEP, CMS and AEWA.]

## Recoveries from the *Newsletter for Birdwatchers* (1966)—13

Zafar Futehally

Futehally, Z. 2006. Recoveries from the *Newsletter for Birdwatchers* (1966)—12. *Indian Birds* 2 (4): 110–112.

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**I**n the previous issue of *Indian Birds* I confined myself to giving examples of the writing of K.K. Neelakantan. In this I remind readers of R.A. Stewart Melliush.

The Indian branch of Oxford University Press (OUP) has had some remarkable personalities as editors who were fine naturalists as well. R.E. Hawkins, of course, became a legend. Apart from being a pillar of the publishing world he was also a pillar of the Bombay Natural History Society. After retiring from OUP he edited the splendid *Encyclopedia of Indian Natural History*, which became a standard reference work for Indian naturalists. The meticulous Ravi Dayal, who died recently, without being an "active" naturalist, had a taste for natural history.

Another remarkable person who joined OUP in 1966 was Stewart Melliush. By any yardstick he was extraordinary—a competent pianist, a good artist, a calligrapher and an ornithologist who sketched birds on the wing in order to identify them later. He was unapologetic about being eccentric. He did not use clocks or watches; he preferred the hour-glass. He never filled-up at a Burmah Shell petrol pump because he didn't like the colours on the signboards. He was a hopeless correspondent, not because he was an uncaring friend, but because he couldn't send a letter that was not perfect by his standards of calligraphy. In the middle of Gir Sanctuary he seemed to be more interested in studying the ancient little train than looking at lions. Almost from the day he landed in India, Stewart became a close friend, and a very strong supporter of the *News. Birdwatchers*. He designed its front cover, and the masthead, which was never changed. As you will see from the following, he wrote in a knowledgeable, easy, light hearted style which was thoroughly enjoyable.

**Bird books** [Melliush, R.A.S. *News. Birdwatchers* 6 (12): 1–5] Nothing adds so greatly to the pleasures of field ornithology, and makes them meaningful, as the handling, study and regular use of satisfactory literature. Many bird books are intrinsically pleasant and beautifully illustrated; it is little wonder that far more people buy bird books for armchair contemplation than ever dream of doing anything more about birds or watching them than chucking a few crumbs at

sparrows every day. Many will gloat over reproductions of the paintings of Audubon or Gould, G.E. Lodge or David Reid-Henry, who will never be found counting starlings going to roost, or optimistically climbing trees to delve into old abandoned nests full of droppings and slush. The joys of ornithological literature can be savoured independently of the more rigorous study of the living bird.

For the serious birdwatcher, however, his bird books are more coffee table or fireside diversions. They are valuable tools or accessories, often hard to be without. Indeed, they play so big a part in fixing the direction his studies take and the intensity with which he pursues them that their selection should be as deliberate and systematic as that of other far more costly pieces of equipment, like field-glasses and cameras. What books are useful for the birdwatcher in India, and in what degree? This article is supposed to offer a partial answer. It is a review of some of the reference literature available and forthcoming which is relevant to birds in this country. It is not intended to be comprehensive because I have confined myself strictly to books systematically describing birds found in the sub-region, and have said nothing about more discursive literary works such as Lowther's *A "bird photographer in India"* and Macdonald's *"Birds in my Indian garden"*, however excellent they may be. I have also not discussed books on birdwatching in general and of inter-regional application, or those which deal with birds of other regions and yet are useful to Indian observers because species migrate or overlap from one region to another (e.g. Witherby's *"Handbook of British birds"*). There are other omissions due to my own unfamiliarity with the books in question. To the veteran birdwatcher this may well be of no interest whatsoever; but there are many readers of the *Newsletter* whose acquaintance with ornithology is not of long standing and who would be stimulated to far greater activity and interest if they possessed good books to guide them, and knew their way around those which are only to be seen now in libraries or other people's homes.

The book to buy first, unless one lives in an area covered by a provincial survey, is unquestionably Salim Ali's *"The book of Indian birds"*. Wisely, this does not include everything.

There are nearly 2,100 species and sub-species of birds on the subcontinental list, and to illustrate all these in a handy inexpensive volume of portable size and to include adequate text under each entry is impracticable. Salim Ali restricts himself to describing 256 of the commoner birds to be found in every variety of habitat, and all the birds described are illustrated—not all, it must be said, with unqualified success—in colour. There are also numerous photographs. The author has chosen his representative selection of species shrewdly, and his descriptions are models of intelligent compression. It is remarkable how much he can say about a bird in a few short sentences. Salim Ali's writing on birds is always a pleasure to read; he gets the very most out of the English language, his style being lively and colourful and yet at the same time precise. He never forgets how varied his readers will be in their knowledge of his subject, and avoids pretentious displays of erudition and the horrors of writing down to the novice. His scholarship is impeccable. In the introduction and the 30-odd pages at the back devoted to nesting, flight, migration, the usefulness of birds, and birdwatching, he is at his very best...

Mention of the *Journal* [of the Bombay Natural History Society] reminds me that the back numbers of this publication, which has appeared without a break since 1886 and is now in the 63<sup>rd</sup> volume, are the godown in which is embedded by far the greatest store of information about Indian birds, as well as about other forms of animals and plants. In their pages will be found accounts of numerous provincial surveys of bird life, such as 'The birds of Bombay and Salsette' by Salim Ali, Humayun Abdulali, and Hugh Whistler (1939–40), and Whistler and Kinnear's report on their survey of the Eastern Ghats (1930, 1933–7), which is still the only satisfactory published study of the birds of the eastern half of peninsular India and should be examined by all birdwatchers in Andhra and Madras, and perhaps the states which adjoin them too. Then there are numberless letters and notes from correspondents which go to make the *Journal* a kind of Aladdin's cave of treasure. Its entrance is usually to be found buried deep beneath the matted thickets and scrub-and-bush jungle of public libraries. It is well worth hacking a way through the undergrowth now and then and spending an hour or two in sweating communion with its riches. It is also advisable to spare one's posterity such effort and by joining the Society obtain new issues of the *Journal* for oneself every four months. A subscription costs Rs.30/-. It is true that some issues barely recognize the existence of birds at all, being morbidly devoted to such irrelevancies as the pre-coital posturings of snails, or the number of bristles on the big toe of a new kind of louse; but one must learn to take the rough with the smooth, and frequently very useful ornithological notes appear.

Lastly, a brief word about buying books. Theoretically, any bookseller worthy of his calling ought to be able and willing to supply any book which is still in print (i.e. of which the publisher holds unsold stock or which he is reprinting or proposes to reprint). If the bookseller does not have a copy in his own stock, he ought to be prepared to order it, from abroad if necessary & if the import trade control procedure permits, for any *bona fide* customer. Unhappily not every bookseller will take the trouble to order unstocked books—it is often far

easier for him to shake his head and say 'not available', whether he had heard of the title or not—and there are sometimes perfectly respectable reasons why the best of book-sellers cannot satisfy their customers. If frustrated the customer should not give up hope but should write to the publishers and explain his difficulty. Whatever authors may say to the contrary, somewhere in the lower regions of their systems, often modestly hidden from view, publishers usually have a residual urge to barter their wares for gold.

Books which are out of print are much more difficult to come by, but a secondhand bookseller, of which there are a number of good ones in India, can often work miracles.

**The Kentish Plover *Charadrius alexandrinus* Linnaeus, breeding in southern Madras** [Melluish, S. *Newsl. Birdwatchers* 6 (2): 1–2]

So little appears to be known of the breeding habits of some of the commoner but less conspicuous birds resident in India that the following record may be of interest.

Two races of the Kentish Plover, *Charadrius alexandrinus alexandrinus* and *C. a. seebohmi*, are known to be resident in the Indian area. The former's range is defined by Ripley thus, 'Breeds in West Pakistan in Sind, and India in Kutch and Saurashtra (subspecies?), south in winter throughout the Peninsula, Nepal in the terai, and Ceylon' while *seebohmi* is regarded as a Ceylonese race, though Salim Ali (*The birds Of Travancore & Cochin*, 1953) says 'it may possibly be found to breed in Travancore also'. Except for this last conjectural statement, I can find no published mention of the breeding of either race in southern India.

Kentish Plovers are common on the coast of Madras at most times of year, but the first hint I received that they might breed was after Zafar Futehally and I had watched a small plover, which I had carelessly dismissed as a Lesser Sand Plover, performing wing—and tail—drooping and other decoying antics in some plough at Velacheri, a few miles south of Madras city, on 8 February 1964. Mr. Futehally later referred to Henry's *Guide to the birds of Ceylon*, where, at page 291, there is an admirable description of the behaviour we had witnessed. We concluded that the bird seen was a Kentish Plover, but as birds in breeding condition will perform ritual acts of this kind whether they are actually breeding or not, we could not assume it was nesting.

In early May 1964, at Madras in Chingleput district, I found a plover fledgling, which could not fly and which I was thus able to pursue and photograph at short range. A very worried adult Kentish Plover was present to witness this performance, and to confirm the fledgling's identity. Later the same day close by I saw two more adult Kentish Plovers frantically trying to decoy me away from what I could only suppose were young similar to the one I had just seen, or nests. Their tactics were successful.

I have now found a Kentish Plover's nest. I was at Kodikkarai (better known as Point Calimere) in Tanjore district on 14 January 1966, walking along the shore about a mile west of the railway station, when an adult Kentish Plover in very smart livery attracted my attention by running along the sand in front of me in a crouching posture with its wings drooping and its tail fanned out and pressed downwards. Every now and then it stopped and changed its directions,

and occasionally assumed a more upright stance, folding its wings in the normal manner. After a long and tiring day plodding through the mud, and with sundown approaching, I did not feel in the least like hunting for eggs or a fledgling which might after all be purely imaginary. I had just resolved to walk on when I looked down and saw three eggs in the sand at my feet.

These were a matt khaki, blotched all over with sepia, the blotches a trifle denser at the broader ends. In shape they resembled chicken's eggs, the one I measured was approximately 32 by 22 cm in size. They lay with their narrow ends inwards and downwards in a hollow in the sand about four inches in diameter, lined and surrounded by an untidy array of bits of broken shell. I saw no sign of an attempt to cover the eggs with fragments of shell and mud, such as Henry

describes. A few tufts of grass grew round about the depression, but offered no protection to the nest in any way. The nest was 33 feet from the high-water line.

Throughout my examination of this nest the adult bird was silent, and I did not see it again; nor, it will be realized, did I see it approach or sit on the nest, but the chances of the eggs belonging to a different bird or species are, I believe, very remote. The eggs were warmer to the touch than pieces of mollusc shell lying near them and a sitting bird had clearly left them only a moment before I found them.

Calimere is a mere thirty miles from the end of the Jaffna peninsula, and it is possible that the birds there are *seebohmi*. What seems odd is the early date. Henry wrote, 'The breeding season lasts from about March till August, but June and July appear to be the favourite months'.

## Correspondence

### A correction

In 'Correspondence' [*Indian Birds* 2 (3): 78] there is a location error; in the fourth paragraph 'Ladakh' should be replaced by 'Lahoul' so that the sentence reads, "I have seen a flock years ago in Lahoul, besides the track beyond Sissoo."

"Do be more selective of drawings you use—the find drawing of the Black-necked Stork is quite out of place since the text around it is of flycatchers, woodpeckers and other woodland birds. *Fillings* for the sake of obliterating blanks are welcome but need to fit in to a reader's understanding of what he is looking at."

Lavkumar Khacher

14 Jayant Society, Rajkot 360004  
10.vii.2006

### Black Stork *Ciconia nigra* in Konkan, Maharashtra

On the morning of 10.x.2005 we spotted and photographed (enclosed) one immature Black Stork *Ciconia nigra* in a small wetland in Chiplun city (17°31'N 73°31'E), Ratnagiri district

(Maharashtra, India). This might be a first record of the species from the Konkan region. Other birds at the wetland were Painted Stork *Mycteria leucocephala*, Asian Openbill-Stork *Anastomus oscitans*, White-necked Stork *Ciconia episcopus*, Eurasian Spoonbill *Platalea leucorodia* and Gadwall *Anas strepera*.

Rohan J. Lovalekar & Sachin B. Palkar

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### European Roller *Coracias garrulus* in Nagpur, Maharashtra

My friends (Pranav Chahande and Ketan Khamgaonkar) and I would like to report the sighting of a European Roller *Coracias garrulus* on 5.vi.2005 at Ambazari lake in the city of Nagpur (Maharashtra, India). The bird is still present on 10.vi.2005 and has been photographed by Pranav (photo enclosed).

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## Editorial

**T**he evolution of a periodical publication results from the interaction between its editors and readers. Both adjust to each other's needs and styles. From its inception, all material published in *Indian Birds* has been peer-reviewed to ensure its relevance and accuracy. We strongly believe that as a forum that caters to the publishing needs of amateur and professional South Asian ornithologists, *Indian Birds* should provide well researched, dependable data and information.

We receive various types of contributions from our readers. Some are scientific in their style, others popular. Some are checklists of birds seen in an area, some observations of a single species while a few are casual observations at a point in time. Correspondence from members are always welcome and a delight to publish for they are the consequence of thoughtful perusal and the need of the reader to correspond with an author or other readers. We believe that more than

being a scientific ornithological publication we would like to be rigorous about our ornithology.

In this issue, we bring you the first scientific description of a new species for the Indian avifauna and for science. The discovery of the spectacular Bugun Liocichla, in Arunachal Pradesh (India) is cause for joyous celebration for at least two reasons. One, in an age of accelerated extinctions primarily due to habitat destruction, there still exist regions of the earth where 'be dragons'. Two, the strong and immense presence and contribution of amateurs to ornithology—for Ramana Athreya is an astronomer by profession!

Anwaruddin Choudhury, another untiring cataloguer of north-east India's fauna, writes about the birds of Dibru-Saikhowa National Park and Biosphere Reserve and Taej Mundkur updates readers on the present situation of the avian virus in wild birds.



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