Woodpeckers
White-naped Tit
Oriental White-eye
Manufactures of electrical laminations & stampings
Phones: 040-23312774, 23312768, 23312770, Fax: 040-23393985, Grams: PITILAM
Email: hyd2_pittilam@sancharnet.in, Website: www.pittielectriclam.com
Contents

Woodpecker (Picidae) diversity in borer- *Hoplocerambyx spinicornis* infested sal *Shorea robusta* forests of Dehradun valley, lower western Himalayas
*Arun P. Singh* 2

Observations on the White-naped Tit *Parus nuchalis* in Cauvery Wildlife Sanctuary, Karnataka

Avifauna of Jagatpur wetland near Bhagalpur (Bihar, India)
*Brāj Nandān Kumār & Sunīl K. Choudhary* 15

Indian Spotted Eagle *Aquila hastata* nesting in Sonepat, Haryana, India
*Suresh C. Sharma & Jaideep Chanda* 18

Thick-billed Green-Pigeon *Treron curvirostra* in Similipal Hills, Orissa: an addition to the avifauna of peninsular India
*Manoj V. Nair* 19

Status of Lesser Florican *Sypheotides indicus* in Pratapgarh district, Rajasthan, India
*Gobind Sagar Bhardwaj* 20

Nest material kleptoparasitism by the Oriental White-eye *Zosterops palpebrosus* *S. S. Mahesh, L. Shyamal & Vinod Thomas* 22

Fig leaf
*Nina Bhatt* 23

On the Yellow-throated Bulbul in Tamil Nadu, and a plea for more self-explanatory titles
*Ragupathy Kannan & Douglas A. James* 25

In the news 26

Correspondence 28

Editorial 28

Date of publication: 25th June 2010

Front cover: Blue-tailed Bee-eater *Merops philippensis* with Common Clubtail *Ictinogomphus repexus*. **Photographer:** Clement Francis

Back cover: Female Great Black Woodpecker *Dryocopus javensis*. **Photographer:** Niranjan Sant
Woodpecker (Picidae) diversity in borer- *Hoplocerambyx spinicornis* infested sal *Shorea robusta* forests of Dehradun valley, lower western Himalayas

Arun P. Singh


Arun P. Singh, Entomology Division, P.O. New Forest, Forest Research Institute (ICFRE), Dehradun 248006, Uttarakhand, India. Email: ranoteaps@gmail.com; singhap@icfre.org

Manuscript received on 14 August 2009.

**Introduction**

The sal heartwood borer *Hoplocerambyx spinicornis* Newman (Coleoptera: Cerambycidae) [sal borer; Fig. 1] is known to cause considerable mortality of sal *Shorea robusta* trees all over the latter’s distributional range in India. Explosive outbreaks of this insect, killing millions of trees over vast stretches of forests (Fig. 2), have been reported from time to time, from as early as 1897 (Stebbing 1899), to as recently as 2001 (Bhandari & Rawat 2001): from Assam 1906–1961; West Bengal 1931–1934; Bihar 1897; Madhya Pradesh 1905, 1923–1928, 1959–1963; Uttar Pradesh: Kalagarh (now in Uttarakhand) 1924–1925, 1934–1937; Himachal Pradesh 1948–1954 (Roonwal 1977). The sal borer generally attacks trees that are dead or practically dead, i.e., felled, victims of windfall, struck by lightning or broken by storms, or damaged, or attacked by root fungus. Healthy standing trees are not attacked unless there is an epidemic of the borers, and the beetles are so numerous that the dead trees are insufficient for them (Beeson 1941). Sal heartwood borer is today the major factor responsible for the decline of sal, besides other biotic, and abiotic factors such as intensive grazing, lopping, felling, etc., which hinder its natural regeneration.

**Relationship between woodpeckers and Cerambycidae beetles**

Woodpeckers (Picidae) feed on adults, grubs, and pupae of wood-boring beetles that infest tree trunks and branches in forest habitat (Ali & Ripley 1987). A notable influx of woodpeckers accompanies an epidemic of borers in natural forests (Beeson 1941; Dennis 1967; Stoddard 1969; Jackson 1988, 2002). Woodpeckers are often cited as the most important predators of wood-boring cerambycid larvae (Brooks 1923; Linsley 1961; Solomon 1968, 1972, 1974; Jackson 2002). It is possible that larvae near ground level, and near branch points within the canopy, are less vulnerable to woodpecker predation than those in a clearly exposed small-diameter tree trunk. Similarly, adult beetles on the exposed trunk may be more vulnerable to woodpecker predation while ovipositing, which may take up to half an hour or more. Apart from small-sized beetles, and vegetable matter such as berries and seeds, cerambycid grubs form the main diet (38%–46%) of large-sized woodpeckers like the Ivory-billed Woodpecker *Campephilus principalis* in North America (Jackson 2002). Predatory woodpeckers, e.g., Three-toed Woodpecker *Picoides tridactylus*, are also known to play a significant role in regulating bark and longhorn beetle populations in coniferous forest landscapes in Europe (Fayt et al. 2003). A positive correlation has been established between the abundance of longhorn beetle larvae, and the brood-size of woodpeckers—the Three-toed Woodpecker nestlings’ main...
Singh: Woodpeckers & sal borer

Three-toed Woodpecker is also known to show the greatest numerical response to beetle prey density, with population densities increasing up to 44.8-fold during outbreaks, relative to those supported at endemic beetle levels (Fayt et al. 2003). Some species of large-sized woodpeckers, like Black-backed Woodpecker *P. arcticus*, which is extremely specialized in its foraging niche, feed exclusively by excavating larval wood-boring beetles during outbreaks in dying conifers for only 2–3 years after forest fires in Alaska (Murphy & Lehnhausen 1998). Thus, woodpeckers are important bio-agents that feed on cerambycid borer larvae and pupae in natural forests, on old aged trees, and help in suppressing population of this pest to some extent.

However, extensive study is required to establish a similar relationship between the sal heartwood borer and woodpeckers in the tropical moist deciduous sal forests of the lower western Himalayas. With this aim, the present study was carried out to evaluate the intensity of sal heartwood borer infestation in sal stands and examine the relationship of borer infestation with abundance and diversity of woodpeckers.

**Study area**

Dehradun valley, which covers an area of c. 2,000 km² and lies in the lower western Himalaya in the state of Uttarakhand, was selected as the study area to work on this problem. About 51–58% land area in the valley was under tropical moist deciduous sal forests (Figs. 23, 24) (FSI 1995). These forests have a history of sal borer outbreaks all over the valley. Here, during 1916–1924 an outbreak at Thano range covered 18 km², and over 80,000 trees perished. During 1952–1953, again at Thano, 8,475 badly infested trees had to be felled. In 1958–1960 an outbreak at Timli range destroyed 12,860 trees. In 1961 in Lachhiwala range a ‘light’ outbreak was reported. Then in 1965, once again in Thano range, 4.8 km² of forest was affected with 2,379 being trees attacked, followed by 21% infestation of trees by the borer during 1976–1978 (Roonwal 1977; Singh & Mishra 1986). Recently, during 2000–2002, large-scale mortality of trees has occurred again, due to sal borer attacks in the valley (pers. obs. of author).

**Material & methods**

**Selection of study sites**

Topographic maps and satellite imagery (IRS-IC 1998) data of the study area, depicting the extent of sal forest cover in Dehradun valley, were procured from Forest Survey of India (FSI) and Survey of India, Dehradun for selection of study sites (Fig. 3). Areas of sal forest covering more than 4 km², and with a canopy cover > 50%, were identified as potential sites for study. Fifteen forest ranges with large sal forest tracts were thus identified as suitable for this study. Based on the ground surveys nine sal forest sites (eight in reserve forest area and one inside Rajaji National Park) distributed all over the valley were marked and identified for sampling (Fig. 3; Table 1). Field surveys were then carried out for collecting...
baseline habitat data for these study sites namely, percentage of borer-infested sal trees; tree girth at breast height (GBH); density per hectare, and tree species composition of sites. These were determined by laying down 16 vegetation plots (quadrates of 10 x 10m) in each site. Total numbers of sal trees were then counted in each plot, and were separated into borer-infested (including dead ones) and un-infested sal trees, to calculate percentage of borer infestation.

**Woodpecker surveys**

Woodpecker surveys were carried out at each site visually, using binoculars and field guides. At each site, a transect of one kilometer was marked through the forest, and walked through the vegetation plots for 60 min., at a stretch, between 0800 and 1700 hrs for sampling occurrence of woodpecker species. All woodpecker species up to 25 m on either side of transects, were identified and their numbers recorded. Nine sampling surveys were carried out at each site from May 2004 to February 2006, and February 2007, covering all the seasons.

Woodpeckers were identified with the help of various field guides (Ali & Ripley 1987; Grimmett et al. 1998; Kazmierczak 2000; Rasmussen & Anderton 2005). Plants in vegetation plots were identified with the help of Kanjilal (1969), and the plant taxonomist at the Herbarium, Botany Division at FRI, Dehradun.

**Analysis**

Relative abundance of woodpeckers, computed as average of their abundances across samples for each site, was correlated with percentage of borer-infested sal trees using Pearson’s correlation coefficient. I also did regression analysis to model the relationship between woodpecker species and sal-borer occurrence. Species diversity of woodpeckers (H’) was calculated from the Shannon Index as follows (where \( p_i \) is the proportion of the \( i \)th species in the sample):

\[
H' = - \sum p_i \log p_i
\]

Shannon Index is essentially a combined measure of both species richness (i.e., number of species) and evenness of abundances (i.e., how equitably all the species are distributed in terms of their population) in a sample. In other words, species diversity will be the highest in an assemblage of woodpeckers with a large number of species and with all the species occurring in high yet equal numbers.

The structure of woodpecker assemblages and their habitat selection were studied by Principal Components Analysis (PCA), which seeks to reduce a large number of species or ecological factors into a few meaningful dimensions for easy interpretation. I first generated a ‘site plot’ where the sampling sites were

---

### Table 1. Site parameters: vegetation and habitat condition of forest stands in Dehradun valley.

<table>
<thead>
<tr>
<th>Sl. no.</th>
<th>Site/Range</th>
<th>Vegetation</th>
<th>Percentage of borer infested sal trees</th>
<th>Percentage of trees with GBH &gt; 100cm</th>
<th>Dominant GBH class (cm)</th>
<th>Shannon Diversity Index of Woodpeckers*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Kansrao (Rajaji NP)</td>
<td>Pure sal and mixed patches with marshy vegetation having <em>Treia nudiflora</em>; <em>Syzygium cumini</em></td>
<td>Low (1.7)</td>
<td>72</td>
<td>101-125</td>
<td>0.737</td>
</tr>
<tr>
<td>2</td>
<td>Karvapani RF</td>
<td>Mainly mixed sal patches and marshy vegetation having <em>Sapium somniferum</em>; <em>S. cumini</em>; <em>T. nudiflora</em></td>
<td>High (20.3)</td>
<td>56</td>
<td>76-100</td>
<td>0.823</td>
</tr>
<tr>
<td>3</td>
<td>Timli RF</td>
<td>Mainly sal dominant, without water</td>
<td>Low (2.7)</td>
<td>45</td>
<td>51-75</td>
<td>0.690</td>
</tr>
<tr>
<td>4</td>
<td>Thano RF</td>
<td>Mainly sal dominant, without water</td>
<td>High (36.6)</td>
<td>59</td>
<td>101-105</td>
<td>0.919</td>
</tr>
<tr>
<td>5</td>
<td>Kalusidh-Lacchiwala RF</td>
<td>Mixed patches with marshy vegetation having <em>T. nudiflora</em></td>
<td>Low (0.5)</td>
<td>46</td>
<td>76-100</td>
<td>0.749</td>
</tr>
<tr>
<td>6</td>
<td>Chowki RF</td>
<td>Pure sal with mixed vegetation in nullahs and water and <em>S. somniferum</em></td>
<td>Moderate (15.7)</td>
<td>36</td>
<td>51-75</td>
<td>0.799</td>
</tr>
<tr>
<td>7</td>
<td>Rikhauli RF</td>
<td>Pure hill sal, without water</td>
<td>Low (0.8)</td>
<td>9</td>
<td>25-50</td>
<td>0.345</td>
</tr>
<tr>
<td>8</td>
<td>Jhajra RF</td>
<td>Pure and mixed patches, without water</td>
<td>High (22.5)</td>
<td>58</td>
<td>101-125</td>
<td>0.761</td>
</tr>
<tr>
<td>9</td>
<td>Chandpur RF</td>
<td>Mainly pure sal, water in a pool, with <em>S. cumini</em>, and <em>S. somniferum</em> Old infestation</td>
<td>High (24.7)</td>
<td>47</td>
<td>101-125</td>
<td>0.647</td>
</tr>
</tbody>
</table>

NP=National Park; RF=Reserve Forest; * Shannon Diversity Index of woodpeckers—as determined in this study
grouped according to similarity of their woodpecker species composition. Then, a ‘species plot’ was drawn in which all the woodpecker species were clustered on the basis of similarity of their distribution in a two-dimensional space as defined by the sampling sites in PCA. All the statistical analyses were done using the software SPSS v.11.00.

Results & discussion
Dehradun has a rich diversity of woodpeckers, as 17 species are known to exist in the district, both in the hills, and valley/plains (Singh 2000, 2002). However, except for four species, namely, Himalayan Dendrocopos himalayensis, Rufous-bellied D. hyperythrus, and Scaly-bellied Picus squamatus Woodpeckers, which are strictly hill species, and Brown-capped Pygmy Woodpecker D. nanus, which is mainly found in dry deciduous habitat in the Indian plains, the remaining 13 spp., known from the area were observed in the sal forests of Dehradun valley (below 1,000 m), the lower western Himalaya, during the survey.

Nine sites were sampled and their vegetation characteristics are given in Table 1.

Seasonality of woodpeckers in sal forests
It was observed that the woodpeckers, in general, were most abundant during winter (from December to February) in sal forests of Dehradun valley (Fig. 5).

Relative abundance
Systematic sampling of woodpeckers (Fig. 9) revealed that Grey-headed Woodpecker Picus canus (Fig. 4) was the most abundant species in the entire study area followed by Fulvous-breasted Dendrocopos macei (Fig. 10) and Grey-capped Pygmy D. canicapillus (Fig. 15) Woodpeckers. The least common species were Yellow-crowned D. mahrattensis (Fig. 8), Brown-fronted D. auriceps (Fig. 21), and Streak-throated Woodpeckers P. xanthopygaeus (Fig. 6).

Relationship between individual species abundance & borer infestation
Across sites, the relative abundance of woodpeckers was found to be greatest in Kansrao, followed by Thano, Jhajra, and Karvapani.

Fig. 5. Relative abundance of woodpecker per sampling through different months of the year in sal forests of Dehradun valley.

Fig. 6. Streak-throated Woodpecker Picus xanthopygaeus.
PCA was carried out for all the sites (barring Chandpur) with respect to relative abundance of 13 species of woodpeckers. Ordination plots were generated for grouping of both, woodpecker species, and sampling sites, based on the two most important components extracted. In the analysis, the first component explained 51.6% of variation in the relative abundance of woodpeckers, while the second component contributed to 21.2%

**Woodpecker communities in sal forests of Dehradun valley:**

The last three sites also housed the highest proportion of borer-infested sal trees (Fig. 12). However, abundances of only two species namely, Greater Yellownape *Picus flavinucha* (Fig. 13), and Lesser Yellownape *P. chlorolophus* (Figs 14, 16) were found to be positively related to sal-borer frequency.

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Species</th>
<th>Residential status</th>
<th>Month of maximum abundance in sal forests</th>
<th>Preference for forest habitat</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Greater Yellownape <em>Picus flavinucha</em></td>
<td>Resident</td>
<td>December</td>
<td>Sal dominant</td>
</tr>
<tr>
<td>2</td>
<td>Lesser Yellownape <em>P. chlorolophus</em></td>
<td>Resident</td>
<td>August</td>
<td>Sal dominant and mixed patches</td>
</tr>
<tr>
<td>3</td>
<td>Grey-headed Woodpecker <em>P. canus</em></td>
<td>Resident</td>
<td>December</td>
<td>Sal dominant</td>
</tr>
<tr>
<td>4</td>
<td>Streak-throated Woodpecker <em>P. xanthopygaeus</em></td>
<td>Resident</td>
<td>January</td>
<td>Mixed patches with sal</td>
</tr>
<tr>
<td>5</td>
<td>Greater Flameback <em>Chrysocolaptes lucidus</em></td>
<td>Resident</td>
<td>December; February</td>
<td>Mixed patches with sal</td>
</tr>
<tr>
<td>6</td>
<td>Himalayan Flameback <em>Dinopium shorii</em></td>
<td>Resident</td>
<td>December; February</td>
<td>Sal dominant</td>
</tr>
<tr>
<td>7</td>
<td>Black-rumped Flameback <em>D. benghalense</em></td>
<td>Resident</td>
<td>September</td>
<td>Mainly mixed patches</td>
</tr>
<tr>
<td>8</td>
<td>Fulvous-breasted Woodpecker <em>Dendrocopos macei</em></td>
<td>Resident</td>
<td>October-December</td>
<td>Sal dominant and mixed patches</td>
</tr>
<tr>
<td>9</td>
<td>Grey-capped Pygmy Woodpecker <em>D. canicapillus</em></td>
<td>Resident</td>
<td>October-February</td>
<td>Mixed patches with sal</td>
</tr>
<tr>
<td>10</td>
<td>Brown-fronted Woodpecker <em>D. auriceps</em></td>
<td>Winter Migrant-Vagrant</td>
<td>February</td>
<td>Sal dominant</td>
</tr>
<tr>
<td>11</td>
<td>Yellow-crowned Woodpecker <em>D. mahattensis</em></td>
<td>Vagrant</td>
<td>November</td>
<td>Mixed patches (mainly non-sal)</td>
</tr>
<tr>
<td>12</td>
<td>Rufous Woodpecker <em>Micropterus brachyrurus</em></td>
<td>Uncommon resident</td>
<td>May</td>
<td>Mixed patches with sal</td>
</tr>
<tr>
<td>13</td>
<td>Speckled Piculet <em>Picumnus innominatus</em></td>
<td>Resident</td>
<td>February</td>
<td>Mixed patches with sal</td>
</tr>
</tbody>
</table>
First ordination plot sought to group sampling sites on the basis of their woodpecker communities (Fig. 18); in particular, component 1 was represented by Greater Yellownape and component 2 the Lesser Yellownape. In this space, two prominent clusters of sites were obtained: i) Karvapani, Jhajra, and Chowki and ii) Kalusidh, Thano, Kansrao, and Timli. Examining the geographical location of these sites, it became clear that spatial proximity had also contributed to much of their similarity in woodpecker composition (Fig. 3). It is also interesting to note that Kalusidh, Kansrao and Timli in the second cluster had very low borer infestation rates.

In the second ordination plot, woodpecker species were grouped based on their habitat selection as inferred from their distribution across sites. In the analysis, the first component explained 51.8% of variation in the relative abundance of woodpeckers, while the second component contributed to 23.7% of variation, with component 1 represented by Karvapani, and component 2 by Chowki. As evident from the plot (Fig. 19), Himalayan and Greater Flamebacks shared similar habitat requirements. Similarly, Greater Yellownape, Rufous Woodpecker, and Streak-throated Woodpecker showed greater similarity in their habitat occupancy.

It is, therefore, clear that habitat selection of woodpeckers in Doon valley is not heavily influenced by rate of sal-borer infestation, though both the yellownapes do seem to show marked proclivity to borer-infested forest patches.

Amongst the 11 resident species in TMDSF at least six showed preference to sal dominant patches in TMDSF (Table 2).

**Conclusion**

Out of 13 species of woodpeckers sampled in tropical moist deciduous sal forests of Dehradun valley, the abundant species were, Grey-headed Woodpecker, Fulvous-breasted Woodpecker, Grey-capped Pygmy Woodpecker, Greater Flameback, Lesser...
At species level only two species, Greater Yellownape, *Picus flavinucha* and Lesser Yellownape, *Picus chlorolophus* showed significant increase in borer infested stands, suggesting that these species could be important predators of the sal heartwood borer. Amongst resident species of woodpeckers, abundance of Greater Yellownape, Black-rumped Flameback, and Himalayan Flameback, respectively. While, five species were uncommon, namely, Greater Yellownape, Brown-fronted Woodpecker, Speckled Piculet (*Fig. 20*), Rufous Woodpecker, and Streak-throated Woodpecker, respectively. The remaining two species are vagrant records. The Yellow-crowned Woodpecker was rare in TMDSF of Dehradun valley, as it prefers ‘dry deciduous’ vegetation lying south of the valley. On the other hand, Brown-fronted Woodpecker (*Fig. 21*), occurs mainly in the higher hills (above 1,400m), but was also observed once in TMDSF of the valley as it descended down during extreme winter conditions in sal forests.

Highest seasonal abundance of woodpeckers was recorded during winter (December-February) in sal forests. Species diversity of woodpeckers was greater in sites with high borer infestation (> 20% borer infested trees) as compared to stands with low infestation (< 3% infestation) indicating that borer infested sites attract greater diversity of woodpeckers. Thus, woodpeckers in general play a significant role in predating on the borer thereby minimizing the borer infestation. This is in consistency with other studies outside sal forests (Beeson 1941; Dennis 1967; Stoddard 1969; Jackson 1988, 2002).

![Greater Yellownape](image1)

**Greater Yellownape** *Picus flavinucha* five species were uncommon, namely, Greater Yellownape, Black-rumped Flameback, and Himalayan Flameback, respectively. While, five species were uncommon, namely, Greater Yellownape, Brown-fronted Woodpecker, Speckled Piculet (*Fig. 20*), Rufous Woodpecker, and Streak-throated Woodpecker, respectively. The remaining two species are vagrant records. The Yellow-crowned Woodpecker was rare in TMDSF of Dehradun valley, as it prefers ‘dry deciduous’ vegetation lying south of the valley. On the other hand, Brown-fronted Woodpecker (*Fig. 21*), occurs mainly in the higher hills (above 1,400m), but was also observed once in TMDSF of the valley as it descended down during extreme winter conditions in sal forests.

Highest seasonal abundance of woodpeckers was recorded during winter (December-February) in sal forests. Species diversity of woodpeckers was greater in sites with high borer infestation (> 20% borer infested trees) as compared to stands with low infestation (< 3% infestation) indicating that borer infested sites attract greater diversity of woodpeckers. Thus, woodpeckers in general play a significant role in predating on the borer thereby minimizing the borer infestation. This is in consistency with other studies outside sal forests (Beeson 1941; Dennis 1967; Stoddard 1969; Jackson 1988, 2002).

![Lesser Yellownape](image2)

**Lesser Yellownape** *Picus chlorolophus* female.

At species level only two species, Greater Yellownape and Lesser Yellownape showed significant increase in borer infested stands, suggesting that these species could be important predators of the sal heartwood borer. Amongst resident species of woodpeckers, abundance of Greater Yellownape, Lesser Yellownape, Grey-headed Woodpecker, Himalayan Flameback (*Fig. 11*); Rufous-breasted Woodpecker were more in pure sal stands as compared to mixed forest stands. On the other hand abundance of Streak-throated Woodpecker, Rufous Woodpecker (*Fig. 17*), Grey-capped Pygmy Woodpecker, Greater (*Fig. 22*) and Black-rumped Flameback (*Fig. 7*) had more abundance in mixed
Indian Birds
Vol. 6 No. 1 (Publ. 25th June 2010)

Indian Birds
Vol. 6 No. 1 (Publ. 25th June 2010)

Fig. 17. Rufous Woodpecker Micropterus brachyrurus.

Fig 17: Ordination of woodpecker sites in species space in Dehradun valley based on two most important components.

Fig 18: Ordination of woodpecker sites in species space in Dehradun valley based on two most important components.

Fig. 19. Ordination of species in sites space in Dehradun valley based on two most important components.

Fig. 19: Ordination of species in sites space in Dehradun valley based on two most important components.

Fig. 17. Rufous Woodpecker Micropterus brachyrurus.

It was also determined that proximity of sites with each other played a significant role in determining species composition of sal forest in Dehradun valley than other factors i.e. borer

forest than in pure sal stands. Species preferring sal dominated stands should thus play a major role in checking the borer infestation as compared to the other species.

It was also determined that proximity of sites with each other played a significant role in determining species composition of sal forest in Dehradun valley than other factors i.e. borer

It was also determined that proximity of sites with each other played a significant role in determining species composition of sal forest in Dehradun valley than other factors i.e. borer
infestation.

Acknowledgements
This study was part of the fellowship - Dr. Salim Ali National Wildlife Fellowship Award 2001 under which this study was carried out, from June 2004 to March 2007. I thank the Wildlife Division, Ministry of Environment and Forests, Government of India for the grant of this fellowship. I also thank the Director General, ICFRE, Dehradun, Director, FRI, and Head, Entomology Division, FRI, Dehradun, for providing the necessary facilities to carry out the above study. Thanks are also due to H. B. Naithani for identification of plants, and to Dinesh Kumar and Raman Nautiyal for their help in statistical analysis.

References

Beeson, C. F. C., 1941. The ecology and control of the forest insects of India and neighboring countries. Dehradun: Vasant Press.


Observations on the White-naped Tit Parus nuchalis in Cauvery Wildlife Sanctuary, Karnataka


The White-naped Tit Parus nuchalis is endemic to India with a restricted distribution that is largely confined to secondary forest mainly comprising thorny scrub-forest (Ali & Ripley 1987). It has a limited geographical range with a disjunctive distribution of two separate populations, in the western and southern parts of the country. In western India, it is recorded in northern Gujarat, central and south-central Rajasthan; and in southern India, in the broken hill-ranges of the Eastern Ghats spread through Andhra Pradesh (Jerdon 1863; Suresh 2007), Tamil Nadu, and Karnataka (Lott & Lott 1999) that connects to the southern parts of the country. In western India, it is recorded on 27 January 2009 we observed two White-naped Tits land on an Albizia amara tree. One of them remained perched for about ten minutes, thus providing a good opportunity to photograph it. A rushing flight of Rose-ringed Parakeets Psittacula krameri right above the tree drove the tit out of sight. We did not see the tits the next day. Again on 27 January 2009 we observed two White-naped Tits on an A. amara tree at about 0800 hrs, feeding in the last dying leaves and many emerging flowers. Four Yellow-throated Sparrows Petronia xanthocollis foraging in the same tree did not tolerate their presence and drove them away.

Both these sightings were in the southern parts of the dry-deciduous forests (Fig. 1) around Gopinatham village. This is a medium-sized water body located close to, and west of the village, catering to its water needs. A stream, ‘Erkayum’ flowing between Nagamale (cobra hill), and Mailamale (peafowl hill) augments the water in the tank. Three sides of the tank, with the exception of the eastern bund, are covered by dry deciduous forest, with the vegetation extending right up to its shoreline. The vegetation predominantly comprises A. amara trees, shrubby undergrowth of Barleria longiflora, Lantana camara, Solanum pubescens, and Cissus quadrangularis. The habitat here is similar to the one described in Lott & Lott (1999).

The following insectivorous birds shared the White-naped Tit’s habitat, during our two observations—White-browed Fantail Rhipidura aureola, Hoopoe Upupa epops, Rufous Treepie Dendrocitta vagabunda, Yellow-throated Sparrow, and White-headed Babbler Turdoides affinis. A pair of Common Woodshrike Tephrodornis pondicerianus was observed feeding a solitary fledgling. Four European Bee-eaters Merops apiaster were observed in the vicinity. Although our checklist finally showed 82 species, the Great Tit P. major was conspicuous by its absence.

Subsequent to the sightings, Praveen (2009) pointed out, in an online discussion, that all previous sightings of the White-naped Tit (Ali & Whistler 1942; Lott & Lott 1999) were from winter, and to establish that the birds were actually resident, it would be necessary to record their presence during the non-winter months.

Our trip on 6–7 June 2009, to the same area, yielded more sightings of the bird. We recorded two White-naped Tits (Fig. 2) on

Fig. 1. White-naped Tit Parus nuchalis habitat in Cauvery Wildlife Sanctuary.
6 June 2009 at 1500 hrs, some four kilometers away from the Palar Bridge deviation (11°57'14"N 77°38'58"E) towards Gopinatham village. Stands of *A. amara*, *Chloroxylon swietenia*, and shrubs of *B. longiflora*, *Solanum pubescens*, and *Acalypha fruticosa* dominate the habitat here. We travelled a further 15 km and reached the place where we sighted the tit in January 2009. An overcast sky in the evening did not yield any sightings of the tit. On 7 June 2009, we searched for the bird in similar habitat, near the road to the Palar Bridge from the Male Mahadeswara hill, and recorded the tit at two different locations: three birds together, and a solitary bird within a distance of 300 m. We were again able to photograph one of the tits. Details of our sightings are presented in Table 1, and Fig. 3, and updated sightings for southern India are shown in Fig. 4.

Incidentally, we searched in vain, parts of the *Ellemala* and *Odakehalla* ranges in the western part of the Cauvery Wildlife Sanctuary, on either side of the Mysore–Male Mahadeshwara Hill road, for the White-naped Tit. Here, the vegetation composition is similar to the one observed previously for the White-naped Tit. However, we recorded only Great Tit in this area. Four hours of searching, two hours each on the morning of 6 June and the evening of 7 June, were probably insufficient to ascertain the complete absence of the tit. At certain locations in Rajasthan, the Great Tit has been observed in the same habitat occupied by White-naped Tit (BirdLife International 2001), and given the contiguous nature of the habitats here, the possibility that they could occur together should be explored in the future.

---

### Table 1. Updated sightings of the White-naped Tit *Parus nuchalis* in the Eastern Ghats

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Place of sighting</th>
<th>Date of sighting</th>
<th>Recorded by</th>
<th>No. of birds seen</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Around Palar Bridge, Cauvery Wildlife Sanctuary, Chamarajanagara District, Karnataka</td>
<td>6 June 2009</td>
<td>KBS, DTH, MS, TG, AS, MKV &amp; ASP</td>
<td>Two</td>
<td>Present survey</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7 June 2009</td>
<td></td>
<td>Three+One</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Gopinatham, Cauvery Wildlife Sanctuary, Chamarajanagara District, Karnataka</td>
<td>27 January 2009</td>
<td>KBS &amp; ASP</td>
<td>Two</td>
<td>Present survey</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25 January 2009</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Arogyavarm, Chittor District, Andhra Pradesh</td>
<td>18 December 2003</td>
<td>Jones</td>
<td>Two</td>
<td>Jones 2007</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 January 2004</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>February 2005</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Santhemaralli, Yelandur Hobli, Chamarajanagara District, Karnataka</td>
<td>November 1999</td>
<td>Jugal Tiwari</td>
<td>Two</td>
<td><a href="http://www.delhibird.net">www.delhibird.net</a></td>
</tr>
<tr>
<td>5</td>
<td>Heganuru State Forest, Kanakapura, Bangalore Rural District, Karnataka</td>
<td>November 1995</td>
<td>Lott &amp; Lott</td>
<td>Four</td>
<td>Lott &amp; Lott 1999</td>
</tr>
<tr>
<td></td>
<td></td>
<td>October 1995</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>January 1987</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>November 1986</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 December 1985</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Mekedatu, Kanakapura, Bangalore Rural District, Karnataka</td>
<td>30 December 1984</td>
<td>Subramanya</td>
<td>Two</td>
<td>Lott &amp; Lott 1999</td>
</tr>
<tr>
<td>7</td>
<td>Satyamangala, Biligirirangan Hills, Chamarajanagara District, Karnataka (now in Tamil Nadu)</td>
<td>14 September 1934</td>
<td>Morris</td>
<td>One (Juvenile)</td>
<td>Ali &amp; Whistler 1942</td>
</tr>
<tr>
<td>8</td>
<td>Bangalore, Karnataka</td>
<td>1930</td>
<td>Stewart</td>
<td>One</td>
<td>Ali &amp; Whistler 1942</td>
</tr>
<tr>
<td>9</td>
<td>Masinagudi, Tamil Nadu</td>
<td>March 1997</td>
<td>Bishop</td>
<td>One</td>
<td>BirdLife International 2001</td>
</tr>
<tr>
<td>10</td>
<td>Veliconda range, Nellore, Andhra Pradesh</td>
<td>Undated</td>
<td>Jerdon</td>
<td>One</td>
<td>Jerdon 1863</td>
</tr>
</tbody>
</table>
We regularly visit vast marshlands, and water bodies, for winter waterfowl counts around Santhemaralli where Jugal Tiwari recorded the White-naped Tit (Tiwari 1999). We have not observed the White-naped Tit here, just the Great Tit, near the waterbodies, on a few occasions. *P. nuchalis* is known to move over 5–7 km for foraging if the forest is fragmented, and thus may cover larger distances in search of food. Ringed birds in Kachchh, Gujarat, have been recaptured some 5–7 km away from the place of ringing (Jugal Tiwari, pers. comm.).

Although we noticed that *P. nuchalis* was not a difficult bird to spot in suitable habitat, we do not conclude that the species is common in the area. In the recent past, efforts to survey the interior regions of the Male Mahadeshwara Hills, and nearby areas, for the tit were severely hindered due to limited access and the presence of poachers, and security forces. We plan to conduct surveys in future to look for the species more intensively in the area. Observations of the species from the nearby Chittoor district in Andhra Pradesh (*Table 1; Fig. 4*) indicate that the distributional range of the species could be much wider in southern India, but that it may be found in small numbers in large tracts of fragmented habitats. Future threats to the tit’s habitat at Male Mahadeshwara Hills could include quarrying for granite, and habitat loss.

**Acknowledgements**

We thank ACF (Wildlife) M. K. Ravindra, Hanur Division, RFO (Wildlife) M. Nagaraj, MM Hill range, Forester M. Keshava, watchers Iyyandorai, S. Subramanya for whetting an earlier draft of this paper, and S. Thejaswi for providing useful references and improvements to the manuscript. Muthu, and Soundar Rajan for able support, and hospitality. We also thank Jugal Tiwari for his observations on the habitat and behavior of the tits, S. Subramanya for whetting an earlier draft of this paper, and S. Thejaswi for providing useful references and improvements to the manuscript.

**References**


Jerdon, T. C., 1863. *The birds of India being a natural history of all the birds known to inhabit continental India: with descriptions of the species, genera, families, tribes, and orders, and a brief notice of such families as are not found in India, making it a manual of ornithology specially adapted for India*. Vol II.-Part 1. 1st ed. Calcutta: Published by the author (Printed by The Military Orphan Press). (Quoted based on citation in Lott & Lott 1999; Jones 2007; Shyamal 1996.)


Tiwari, J. K., http://speciesguide.delhibird.net/internal/86/tit_white_naped.htm

**Editorial Committee’s note:**

The two records of Uttangi (1994, 1995), of *P. nuchalis* from the evergreen to semi-evergreen biotope at Anshi National Park, and in the residential backyard of Dharwad town, need confirmation, and hence have not been included in the above paper. In addition, the habitats where he saw the birds do not fit the typical *Albizia* or *Acacia* dominated open jungle found in southern Karnataka (especially the Cauvery Wildlife Sanctuary belt (Lott & Lott 1999) / Andhra Pradesh (Jones 2007), although it is stated that the Dharwad locality is at the edge of a transitional belt of thorn forest. Also, the Wynaad record of the species (Zacharias & Gaston 1993) is not confirmed as yet, and it is indicated that the identification of *P. nuchalis* during one of those Wynaad surveys, when the species is claimed to have been sighted, is doubtful (V. Santharam pers. comm., also Sashikumar et al., 2010, confirming the former).

**References**


**Avifauna of Jagatpur wetland near Bhagalpur (Bihar, India)**

**Braj Nandan Kumar & Sunil K. Choudhary***


Braj Nandan Kumar & Sunil K. Choudhary, Environmental Biology Research Laboratory, University Department of Botany, T.M. Bhagalpur University, Bhagalpur 812007, Bihar. *(Email: sunil_vikramshila@yahoo.co.in)*

Manuscript received on 1 June 2009.

**Introduction**

This study is the first attempt to prepare an inventory of birds dependent on Jagatpur wetland, a perennial wetland in the middle Ganga plain near Bhagalpur, Bihar.

Jagatpur wetland (25°20’219”N 87°02’623”E) is c. 12 km (by road) north-east of Bhagalpur city. It is a perennial freshwater floodplain type of wetland with an area of 0.4 km² in the middle Ganga plain (Table 1). The wetland is mainly rain-fed, but underground seepage also contributes to its volume of water. The area under the wetland includes both government and private holdings.

The wetland supports many types of macrophytes that may be grouped into marginal, submerged, floating, and emergent categories, of which *Eichhornia crassipes* is the dominant free-floating, *Hydrilla verticillata* the dominant submerged, and *Cynodon dactylon* the dominant marginal species in the wetland. The surroundings of the wetland are covered by various tree species like *Mangifera indica*, *Ficus religiosa*, *F. bengalensis*, *F. glomerata*, *F. infestia*, *Dalbergia sissoo*, *Acacia nilotica*, *Eugenia jambolana*, *Borassus flabellifer*, *Phoenix dactylifera*, etc. The marginal upper land area is extensively cultivated.

The wetland is located in a belt of tropical monsoon climate with three distinct seasons: summer—mid-March–mid-June, monsoon—third week of June–October, and winter, November–February.

**Materials & methods**

Monthly bird counts were conducted from August 2003 to July 2005 (Table 2). A country boat was used to cover the entire wetland for this purpose. Birds in the catchment area were also listed. Identification was with the help of several guides (Finn 1981; Woodcock 1984; Ali & Ripley 1987; Ali 1996; Grimmett et al. 1999).

**Results & discussion**

Thirty-four bird species were recorded from the Jagatpur wetland during the study. They belong to 12 families and eight orders. About 79% of the recorded avifauna is wetland-dependent. Out of 34 spp., 21 were resident (61.76%), seven locally migrant (20.58%), and six migrant (17.64%).

It is noteworthy that four species of storks (Ciconiidae) occur in Jagatpur wetland. According to IUCN (1996) and BirdLife International (2001), Greater Adjutant Stork *Leptoptilos dubius* has been categorized as Endangered (En), Lesser Adjutant Stork *L. javanicus* as Vulnerable (VU), and Black-necked Stork *Ephippiorhynchus asiaticus* as Near Threatened (NT). 20 Greater Adjutant Storks, comprising 13 adults and seven immature birds were seen in March–April when the wetland was receding. Two birds had gular pouches. Greater Adjutant storks are the locally migratory wetland species of special conservation interest, and are restricted to the Asia-Pacific region. Being endangered, they face a very high risk of extinction in the wild in the future (Collar et al. 1994). The global population estimate (restricted to Asia-Pacific region only) for the bird is less than 700 (Perennou et al. 1994). According to Asad R. Rahmani, Director, Bombay Natural History Society (pers. comm.), Greater Adjutants have not been sighted outside Assam in recent decades. In view of this, their presence in and around Jagatpur wetland is important. It is also significant that the number (20) sighted in Jagatpur wetland fulfills the Ramsar Criteria of 1% for the wetland to be proposed a Ramsar site. In the Gangetic flood plains, Black-necked Storks have not been reported in recent years outside the state of Uttar Pradesh. Our observation suggests that Bihar may still have populations of this declining stork.

Our survey reveals that Jagatpur wetland is quite rich in avian diversity. The wetland, at present, is under various threats. Availability of water, inflow of pesticides and fertilizers from the surrounding agricultural fields, weed growth, particularly of water hyacinth, extensive fishing, and the hunting of birds for pleasure are among the major threats to the wetland and its avifauna. For conserving the Jagatpur wetland and its rich biodiversity, a management plan should be prepared in such a manner that at the objective level it primarily provides emphasis on protecting the wetland, and at the secondary level it provides an avenue for sustainable utilization of resources of the wetland without jeopardizing its continued ecological values and functions.

---

### Table 1. Morphometric and Bathymetric characters of Jagatpur wetland.

<table>
<thead>
<tr>
<th>Character</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Altitude</td>
<td>17 m</td>
</tr>
<tr>
<td>Maximum length</td>
<td>693 m</td>
</tr>
<tr>
<td>Maximum breadth</td>
<td>350 m</td>
</tr>
<tr>
<td>Maximum depth</td>
<td>3.1 m</td>
</tr>
<tr>
<td>Minimum depth</td>
<td>0.48 m</td>
</tr>
<tr>
<td>Mean depth</td>
<td>1.64 m</td>
</tr>
<tr>
<td>Mean depth/Maximum depth ratio</td>
<td>0.52 m</td>
</tr>
<tr>
<td>Basin shape</td>
<td>Saucer</td>
</tr>
<tr>
<td>Basin slope</td>
<td>Gentle</td>
</tr>
<tr>
<td>Bottom texture</td>
<td>Silted</td>
</tr>
<tr>
<td>Mean maximum annual Temperature</td>
<td>30.5°C</td>
</tr>
<tr>
<td>Mean minimum annual temperature</td>
<td>19.4°C</td>
</tr>
<tr>
<td>Mean annual rainfall</td>
<td>88 mm</td>
</tr>
</tbody>
</table>

---

*Indian Birds* Vol. 6 No. 1 (Publ. 25th June 2010)
<table>
<thead>
<tr>
<th>Species</th>
<th>Status</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Jul</td>
<td>Aug</td>
<td>Sep</td>
</tr>
<tr>
<td>Little Grebe Tachybaptus ruficollis</td>
<td>R</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Little Cormorant Phalacrocorax carbo</td>
<td>R</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Great Cormorant Phalacrocorax carbo</td>
<td>RM</td>
<td>2</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>Oriental Darter Anhinga rufa</td>
<td>R</td>
<td>4</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Purple Heron Ardea purpurea</td>
<td>R</td>
<td>2</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Median Egret Mesophoyx intermedia</td>
<td>R</td>
<td>4</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>Cattle Egret Bubulcus ibis</td>
<td>RM</td>
<td>25</td>
<td>15</td>
<td>25</td>
</tr>
<tr>
<td>Indian Pond-Heron Ardeola grayii</td>
<td>R</td>
<td>10</td>
<td>20</td>
<td>12</td>
</tr>
<tr>
<td>Asian Openbill Anastomus oscitans</td>
<td>R</td>
<td>15</td>
<td>25</td>
<td>30</td>
</tr>
<tr>
<td>Black-necked Stork * Ephippiorhynchus asiaticus</td>
<td>R</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Lesser Adjutant-Stork ** Leptoptilos javanicus</td>
<td>RM</td>
<td>3</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Greater Adjutant-Stork *** Anastomus oscitans</td>
<td>RM</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Oriental White Ibis Threskiornis melanocephalus</td>
<td>R</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Black Ibis Pseudibis papillosa</td>
<td>R</td>
<td>25</td>
<td>15</td>
<td>20</td>
</tr>
<tr>
<td>Large Whistling Teal Dendrocygna bicolor</td>
<td>M</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Lesser Whistling Teal Dendrocygna javanica</td>
<td>R</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Cotton Teal Nettapus coromandelianus</td>
<td>R</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Northern Shoveller Anas clypeata</td>
<td>M</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Northern Pintail Anas acuta</td>
<td>M</td>
<td>100+</td>
<td>25</td>
<td>60</td>
</tr>
<tr>
<td>Gadwall Anas strepera</td>
<td>M</td>
<td>100+</td>
<td>25</td>
<td>60</td>
</tr>
<tr>
<td>Red-crested Pochard Rhynochetos fuligula</td>
<td>M</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Northern Pintail Anas acuta</td>
<td>M</td>
<td>500+</td>
<td>100+</td>
<td>300+</td>
</tr>
<tr>
<td>White-bearded Kingfisher Halcyon smyrnensis</td>
<td>R</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Lesser Pied Kingfisher Ceryle rudis</td>
<td>R</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>White-breasted Kingfisher Halcyon smyrnensis</td>
<td>R</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

R = Resident, RM = Resident migrant, M = Long distance migrant. The species with *, ** and *** denote Near threatened, Vulnerable and Endangered.
Acknowledgements
The authors express their gratitude to University Grant Commission, New Delhi for the financial assistance provided for this investigation under SAP (DRS III) and to Subhasis Dey, Santosh Kumar Tiwari for their help in the field surveys, and to Sushant Dey for photography of wetland birds.

References
Indian Spotted Eagle *Aquila hastata* nesting in Sonepat, Haryana, India

*Suresh C. Sharma & Jaideep Chanda*


Suresh C. Sharma, Gokulnagar, Rohtak Road, Sonepat, Haryana 131001, India. Email sureshchsharma@gmail.com (Author for communication)

Jaideep Chanda, A-47 (D-II Quarters), South Motibagh, New Delhi 110021, India.

*Manuscript received on 27 August 2009.*

**Introduction**
The Indian Spotted Eagle *Aquila hastata* is a poorly studied, and rare species, with a small and declining population and is categorized as Vulnerable by BirdLife International (2009). The species has been sighted in Corbett Tiger Reserve (Uttar Pradesh), Harike Bird Sanctuary (Punjab), Keoladeo National Park (Rajasthan), and some areas in the Gangetic flood-plain (Naoroji 2006). This note reports the sighting of a nesting pair of Indian Spotted Eagle at Sonepat, Haryana (28°56'21"N 76°51'09"E), and lists our observations of nesting, and other general aspects of the species.

**Methods & study area**
SCS spotted a nest of the Indian Spotted Eagle, while birdwatching, on an eucalyptus tree on the bank of an irrigation canal running NW–SE along a parallel road. The tree was in the middle of a long stretch of eucalyptus trees lining the canal for about two kilometres. To the west of the canal were agricultural fields. We observed the chick from the road adjacent to the canal, and occasionally from the agricultural field. The duration of our observations varied from 20 min., up to an hour, and was conducted on a weekly basis from 7 April to 2 August 2009.

**Results**
The Indian Spotted Eagle pair was first spotted on 7 April 2009, bringing nesting material to what turned out to be a nest under construction. We monitored this nest every week since. The nest was on a *eucalyptus* tree, on the central fork in the middle of the tree, c. 12–15 m high. We first sighted a chick on 20 June 2009. We photographed it, from a distance, on 11 July 2009. The nest was observed for about 30 min. during which time the pair visited it twice, but were mobbed by crows both times. The eagles were possibly taking turns to hunt since there was always one bird near the nest. They would not sit at the nest for long, but would leave immediately after visiting it. The non-hunting bird sat on a tree c. 27 m away. Whenever the eagles moved, or flew, they would be violently mobbed by House Crows *Corvus splendens*, which would settle down only when the eagle settled down.

The chick’s cheeping call was distinctly audible from where we watched the nest. It moved about the nest occasionally and became active whenever a parent approached the nest. The chick’s general appearance was fuzzy and grey with a fleshy yellow gape. It was last observed on 26 July 2009, and when the nest was visited on 2 August 2009, it was empty. In all probability it may have fallen into the canal, during a massive storm that struck the area on 30 July 2009, and perished.

**Discussion**
A sedentary breeder, the Indian Spotted Eagle, though present throughout its range, is suspected to have a low density (Naoroji 2006). Parry *et al.* (2006) report that out of 26 records of clutches of the Indian Spotted Eagle, 23 contained only one egg, suggesting low survival rates. This makes our sighting significant, as it indicates that birds find the area conducive to breeding. *Eucalyptus* has not been recorded as a nesting tree for the species (Naoroji 2006). Continuous observation and reporting of these eagles is of utmost importance to assess the actual status of the species and to enable conservation efforts.

**Acknowledgements**
We thank K. S. Gopi Sundar for comments on previous drafts of the manuscript, and the Indian Cranes and Wetlands Working Group for assistance with pertinent references.

**References**


Thick-billed Green-Pigeon *Treron curvirostra* in Similipal Hills, Orissa: an addition to the avifauna of peninsular India

Manoj V. Nair


Thick-billed Green-Pigeon *Treron curvirostra* is a resident bird in the Himalaya—from western Nepal eastward to Sikkim, north Bengal duars and Bhutan, to extreme eastern Arunachal Pradesh—as also in the hills of north-eastern India, south of the Brahmaputra River. It affects well-wooded areas and forests from plains to at least 1,500 m a.s.l. (Ali & Ripley 1987). Its occurrence in peninsular India has not been recorded (Ali & Ripley 1987; Grimmett *et al.* 1998; Kazmierczak 2000; Rasmussen & Anderton 2005). Here, I report its presence in Similipal hills, north-eastern Orissa.

The Similipal Hills (21°55′52″N 85°59′40″E) in Mayurbhanj district of Orissa border the states of Jharkhand and West Bengal, and harbour within their limits both a tiger reserve (with an area of 2,750 km²), and a biosphere reserve (5,569 km²). The terrain is undulating, the altitude ranges from 300 to 1,200 m a.s.l., and forest types include dry deciduous, moist deciduous, and semi-evergreen. Some authorities consider Similipal a part of the Eastern Ghats (Sinha 1971), while others treat it as the south-eastern extension of the Chota Nagpur Plateau (Ray 2005). The area falls under the province of ‘Chhotanagpur’ in the Deccan Peninsula biogeographic zone of Rodgers & Panwar (1988). Despite being an Important Bird Area (IBA Code IN-OR-06), its birdlife is not well documented (Islam & Rahmani 2004).

On 18 October 2006, at 0917 hrs, a flock of six birds were fleetingly sighted on a fruiting *Ficus* sp. tree at Badamakabadi in Pithhabata range, as all of them flushed on approach, evading confirmation. Subsequently, during the course of the next one-and-a-half years of active birding in Similipal, I had five more confirmed sightings, all from dense semi-evergreen, and mixed moist-deciduous forests. The broad blue-green orbital skin, and heavy bill with its red base were diagnostic pointers. Specific locality records and details are as follows:

2 March 2007, Jenabil: a solitary bird seen perched on a leafless emerging branch of a *Shorea robusta* tree in dense semi-evergreen forest adjoining the fields of Jenabil village.

11 March 2007, Upper Barakamura: six birds on a flowering *Bombax ceiba*, along with a mixed species flock gorging on nectar. Despite observations for about 20 minutes, the pigeons were not seen feeding on nectar.

7 November 2007, Bhanjabasa: Loose flock of about 20 birds feeding on a *Ficus* sp. in moist-deciduous sal forest interspersed with semi-evergreen patches, along with Yellow-footed Green-Pigeon *T. phoenicopterus*, and a flock of four Pale-capped Woodpigeons *Columba punicea*.

5 January 2008, Nekedanocha: A pair seen perched on the branch of a *Mesua ferrea*, in dense evergreen forest, along the Nageswarkocha streambed.

26 May 2008, Gurguria: A courting pair, with five Yellow-legged Green-Pigeons, on a leafless fruiting *Ficus mysorensis*, in the mixed moist-deciduous forests surrounding the orchidarium. Confiding, and allowing close approach; the male could be photographed as it sat basking on an exposed branch (Fig. 1).

These observations, which spread throughout the year, seem to indicate that the species is most likely a rare resident in the hills of Similipal, and constitute the first records of the species’ presence in peninsular India. This also supports the putative role of the Similipal Hills as a link between the forests of north-eastern India, and those of the Western Ghats. The northern Eastern Ghats are still relatively unexplored, and intensive investigations along the unexplored patches of these ranges might reveal more occurrences of unrecorded birds from north-eastern India.

![Male Thick-billed Green-Pigeon *Treron curvirostra* in Gurguria, Similipal, Orissa.](image)

**Fig. 1.** Male Thick-billed Green-Pigeon *Treron curvirostra* in Gurguria, Similipal, Orissa.

References


The Lesser Florican *Sypheotides indicus* is the smallest bustard (Otididae) in the world (Fig. 1). It is endemic to the Indian Subcontinent, and listed as Critically Endangered (Collar & Andrews 1994), and is a Schedule I species under the Indian Wildlife (Protection) Act, 1972. Its breeding range is confined to India (Ali & Ripley 1983). It is commonly seen during the monsoon in eastern Rajasthan, and Gujarat. It inhabits tall grasslands, with scattered bushes, and standing crops of cotton, and millet (Ali & Ripley 1983). Its estimated population in India, in 1999 was 3,530 birds (Sankaran 2000). Sankaran (1996) listed Pratapgarh as the most important area for Lesser Florican in southern Rajasthan. However, detailed information is not available regarding the status, and distribution of this species from here (Sankaran 2000). This study presents the current status, and distribution of Lesser Florican in Pratapgarh district.

**Study area**

The present study was conducted in the Kariawad area of Pratapgarh district, Rajasthan (24°08’N 74°47’E), which is an extension of the Malwa Plateau in Rajasthan. Other areas of Pratapgarh, including Sidhpura, Bajrangarh, and Mowdikhera were also surveyed for Lesser Florican. Tree cover in this region is negligible except for scattered growth of *Butea monosperma* and *Acacia nilotica*. The entire landscape is a mosaic of cultivated fields interspersed with isolated patches of grasslands. These grasslands extend up to the boundaries of individual plots of agriculture land.

**Methods**

Observations were carried out in the morning, and evening, in the months of July–September 2006, 2007, and 2008. Birds were counted following Sankaran (2000), by visually searching for birds all over the grasslands and agriculture landscapes through a pair of binoculars, and an SLR camera. GPS coordinates (with a Garmin 72) of the observation points, and sightings of birds were taken. Villagers were also interviewed about the presence of Lesser Floricans in the past and present. On seven different occasions, the jumping display by the male Lesser Florican was observed.

**Results & discussion**

**Status and distribution of Lesser Florican in Pratapgarh region**

Sankaran (2000) estimated a population of 28 Lesser Floricans from this region in 1999. Of these, all but two birds were sighted either in cultivated land or grassland converted into agriculture lands (Sankaran 2000). I was able to count eight birds in 2006, and just four individuals during 2007–2008 (Table 1).

In 1999 Sankaran (2000) reported seven, and eight birds from Sidhpura, and Bajrangarh areas of Pratapgarh respectively. But between 2006 and 2008 I did not spot Lesser Floricans around these two villages. However, floricans were sighted around two other villages—Ratniyakheri and Bori grass bir (Table 1). Sankaran (1996) stated that Pratapgarh attracts at least 30–50 male floricans during a good monsoon. The drastic decline in numbers of Lesser Florican in 2008 in Pratapgarh, as compared to their population in 1999 might be due to changes in the land use pattern, and an increase in the disturbances prevailing in the landscape.

**Observation of Lesser Florican in Pratapgarh**

The presence of Lesser Florican is invariably recorded only when a displaying male is sighted. On 23 July 2006 one male was seen in grassland c. 2 km from Kariabad, on the way to Khoriya village.
The male was on the edge of grassland and the agricultural field, which contained soybean Glycine max, and jowar Sorghum vulgare. The crop was c. 60 cm high, whereas the height of the grass was less than 15 cm. Later, in the Kariabad area, three more male floricans were seen. The peculiar jumping display accompanied by the call, kat...kat...kat...kat, emitted at each jump is diagnostic. The call is audible up to 500 m from the displaying bird! In these areas the Lesser Florican is also known as kaitkata or jukdakaryeo (one who jumps).

During 2006–2008, a cock Lesser Florican has used the same area for its jumping display. This area is a mosaic of agricultural fields with patches of grasslands. The crops were of soybean, maize Zea mays, and jowar. The lek, or the actual jumping area was always in the crop field where the cock finds cover to hide. At this time the height of the surrounding grassland was less than 30–45 cm. On a few occasions the cock displayed in the grassland where the grass was more than 45 cm, adjacent to a field with taller crop, as also reported by Gadhiw (2003). This might be a precautionary measure, where it can quickly seek cover either in the tall crop or the grass. Srivastav & Rana (1998) noted that cock floricans utilized fire lines as display areas, and their marginal tall grass to hide from danger. It was observed that whenever a person neared the jumping cock florican, it stopped jumping until the intruder left the area. In 2007 two male floricans were seen jumping, separated by a distance of around 450 m with a small seasonal stream flowing between them. One was at 24°8’N 74°47’E, while the other, 24°08’N 74°46’E. They jumped alternately, as though indulging in a territorial display. I estimated the mean number of jumps per hour as 51.19 ± se 10.64 varied from 15.21 to 94.28. When undisturbed it was observed jumping as much as 94 times in an hour. The jumping frequency increased with failing light at dusk—the maximum frequency being reached between 1800 and 1900 hrs.

### Table 1. Sightings of Lesser Florican Sypheotides indicus in Pratapgarh district, Rajasthan

<table>
<thead>
<tr>
<th>Name of the area</th>
<th>1999*</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kariabad</td>
<td>11</td>
<td>4</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Ratniyakheri</td>
<td>NA</td>
<td>2</td>
<td>NA</td>
<td>2</td>
</tr>
<tr>
<td>Bori grass bir</td>
<td>NA</td>
<td>NA</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Sidhpura</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Bajrangarh</td>
<td>8</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mowrikhera</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>28</td>
<td>8</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

*After Sankaran (2000)

### Conservation measures

There is an urgent need for protection and conservation of some of the grasslands. Most of the grassland, locally called charnrot or charbigha, has been encroached for agriculture or for other activities. Plantation activities on grassland, by different agencies, including state forest departments, convert a majority of the grasslands into shrub land—by planting Prosopis juliflora, and other species. The remaining grass birs are auctioned every year for fodder, thereby increasing the threat to nests of the bird.

A systematic survey / population estimation of Lesser Florican should be carried out during the monsoon. For this, a detailed study and an inventory of all florican areas have to be made on priority. This will add value to the existing efforts of the state forest department, which conducts a census in summer. Volunteers from NGOs, and experts should be recruited to enhance work force requirements. The village communities around Lesser Florican habitats should be educated about the need for conserving habitat for the bird, and rewarded for giving information about the bird in their vicinity. Incentives should also be given to those farmers who practice organic farming and restrict / prevent grazing their cattle during rainy seasons (Fig. 2).

### Acknowledgements

I thank the state forest department of Rajasthan, Chief Wildlife Warden R. N. Mehrotra, Harkirit Sangha, Y. V. Jhala, Dananjay Mohan, and K. Shivkumar for their constructive comments and helpful suggestions. I also thank Devender Mistry, and Prehlad Singh for their support and continuous assistance.

### References


Jerdon, T. C., 1864. *The birds of India: being a natural history of all the birds known to inhabit continental India; with descriptions of the species, genera, families, tribes, and orders, and a brief notice of such families as are not found in India, making it a manual of ornithology specially adapted for India*. Vol II.-Part II. Calcutta: Published by the author (Printed by George Wyman and Co.).


Nest material kleptoparasitism by the Oriental White-eye Zosterops palpebrosus

S. S. Mahesh, L. Shyamal & Vinod Thomas

The term kleptoparasitism, or ‘parasitism by theft’, is used in ecology to describe a “strategy of stealing items, such as food or nest materials, from other individuals” (Sibley 2001). In birds, kleptoparasitism is relatively uncommon in passerines but well known in skuas (Stercorariidae), and frigatebirds (Fregatidae), which rely extensively on such behavior to obtain food. Other groups such as raptors (Accipitridae; Falconidae), gulls (Laridae), terns (Laridae), coots (Rallidae), some ducks (Anatidae), and shorebirds are known to engage in opportunistic kleptoparasitism.

Nest material stealing by passerines has been reported in the Japanese White-eye Zosterops japonica, Cedar Waxwing Bombycilla cedrorum, Cerulean Warbler Dendroica cerulea, American Redstart Setophaga ruticilla, Blue-gray Gnat-catcher Polioptila caerulea, Red-eyed Vireo Vireo olivaceus, Black-throated Green Warbler Dendroica virens, Northern Parula Parula americana, House Sparrow Passer domesticus, and Orchard Oriole Icterus spurius (Jones et al. 2007; McGillivray 1980). Members of the Tyrannidae, Ploceidae, and other colonial nesters, are known to indulge in interspecific, and intraspecific nest material kleptoparasitism (Hansell 2000). This behavior is said to be common in the Japanese White-eyes in Oahu, Hawaii, where material was lifted from the nests of House Sparrow, Linnet Carduelis mexicanus, and the Elepaio Chasiempis sandwichensis (Guest 1973; Frings 1968).

On 23 May 2009, during a routine birding trip to Nandi Hills, Bengaluru, we spotted an Oriental White-eye Zosterops palpebrosus inside thick undergrowth. It was perched below a cup-shaped nest about a meter and a half above ground, and appeared to be constructing the nest. We took a photograph that shows the white-eye holding the lint of a flying seed in its beak (Fig. 1). On our way back we checked the same spot, and noticed that a Red-whiskered Bulbul Pycnonotus jocosus occupied the nest—on further examination it was obvious that the nest was that of a bulbul and not of a white-eye (Fig. 2).

Notes on bird Behavior are often not published by birdwatchers in the Indian region, and this appears to be the first published record of kleptoparasitism in the Oriental White-eye, but it is possible that the behavior is commoner, considering the behavior of the Japanese White-eye as well as reports on the interactions of the Oriental White-eye with other nesting species—such as the records of interspecific feeding (Balar 2009; Tehsin & Tehsin 1998). In the latter case, Oriental White-eye appears to have gone to the nest for stealing nest material but was ‘trapped’ by the gaping chicks (Tehsin & Tehsin 1998).

References


Fig leaf

Nina Bhatt

O ur ‘adda’ does brisk business. We never suffer low spirits or bootlegger-trouble though we do operate from a ‘dry’ state. In fact, what began as a pilot plant in the backyard, grew to develop offshoots across our neighbourhood. No publicity needed either, to tempt in the steady flow of customers! They crawl in under the gates, leap walls, or simply drop out of the sky.

Ankle deep in russets, corduroy browns, and shocking pink, the ‘Udumbar’ (Sanskrit) or ‘Gular’ (Hindi/Urdu) grows in a steam of its own ferment leaning against our compound wall like a voluptuous yakshini, ‘Umri’ (in the language of the Bhil tribe from Banswara, Rajasthan), our wild fig tree, is patronized by an eclectic clientele—birds, beasts, and humans.

Figs are poked, pecked, and flung from trunk and branches, where they cluster, weaving a thick carpet beneath. With equal speed a workforce of ants, beetles, earthworms, grubs, etc., unravel its gaudy fabric as they wheel the broken fruit to underground factories. For a week every month the house reeks of spilled liquor. To step into the garden is to wade into a pot of afternoon-toddy.

“Oh, so you have an Athi in your garden!” exclaimed an acquaintance as she began to recall her hometown, Coorg, and the wild fig trees grown there to shade coffee plantations. “Buffaloes too are fed its fruit to increase milk-yield, and yet”, she giggled, “to be called an Athi, is to be compared to a very beautiful, very indolent, woman!”

Some of those who frequent our ‘Shebeen’ are no larger than particles of light. The tiny fig wasp that lays its eggs in the raw fig is one such. When it ripens and bursts, the adult wasps crowd out from its plush interiors like an after-show mob at the movies.

In search of insects numerous feathered creatures flicker among the leaves, performing dizzy acrobatics—the black-and-yellow songster—iora, tailorbird, wren-warbler, and fantail-flycatcher.

Rosy pastors arrive by the bus-loads like a wedding party descending in a din of excitement followed by much feasting, yelling, grooming, and generally hanging out. Butterscotch, and sooty black—members of the ‘Starling’ family—they emigrate from Eastern Europe where they breed in summer. Their CVs claim they are some of the greediest locust eaters of India.

On any odd day one can spot a number of garden lizards tipping up the Umra’s trunk. They grow pale upon its branches, blush in a cluster of figs, or scuttle with gaping mouth after moths. In hot pursuit of the lizards come the crow-peasants, fondly known as ‘Dholka’ (country drum) after it’s resonating call.

Our tavern stays open all night for flying foxes. These large fruit bats descend in a flourish of designer capes. In the morning one can pick, from the ground below, an odd assortment of raw guavas, badam, jamun, or mango smuggled in from neighbouring gardens, and chewed at leisure—hanging upside-down by the toes, that is.

Green pigeons, elusive residents of the forests, disguise themselves in the leaf-shadows of the Umri. They feed on figs in groups of twenty or thirty, and take care to remain incognito. Nothing will betray their presence but a seductive—‘coo-ee?’ A sneeze is enough to scatter them in a flash of yellow feet, olive wings.

A curious phenomenon sweeps over our tree every year around the time of the Nazratri festival—mid-September to mid-October. A rain of brown, sand-sized droppings covers the floor of the garden. If one listens carefully, a whisper is audible in the canopy. Minimize a thousand-fold the sound of a person going through a packet of chips, and you will comprehend the sound. It is the murmur of a tree full of wild silk-moth caterpillars systematically chewing up all the leaves.

At first we watched in horror as the tree lost most of its foliage. But the bare tree provided excellent views of cuckoos, and golden orioles that relish the caterpillars. Soon all the leaves that survived the holocaust were covered with bright green pupae. The next act in this mesmerising natural drama was a spectacular show in aerodynamics as the pupae metamorphosed into adult moths that emerged on transparent wings. The sky above the Umri was fragmented by thousands of glassy shards. Bee-eaters caught them from wires under the glare of the sun, drongos stationed themselves on the topmost branches, and flycatchers chased them from the shade of the tree, swivelling their heads from side to side as if watching a tennis match. After an entire month, the Umri restored every single leaf, and behaved as if nothing had happened.

Living next to this Ficus glomerata is like having the Great Gatsby as one’s neighbour. It was at one of its famous orgies that we spotted our first minivet. I had never seen such a shade of vermilion in a bird before!

Langurs adore the fruit. After gorging themselves, they fill up the staircase to our terrace—one on each step—in a daze of inaction, most un-monkey like.

A feral pig too was a regular for some months, sleeping off the high under the tree, and lurching out every evening.

Yet it was the coppersmith that was most addicted to fig popping. She came to us in a CD container after being rescued from a bowl of sambhar at a sit-out eatery. Her constant refrain of...
'toonk, toonk, toonk,' could only be silenced by a bit of fresh fig pushed far down her beak. By the time she could fly I had been conditioned to utter a 'toonk' at the very sight of a fig! A friend from Dahod had a similar story to tell. As a child he had wandered from his tribal village into the jungles near his home, and could not be traced for days. Had he not fed on Umri figs he would not have survived to tell the tale. As he ran his hand down the tree's rotund trunk, one could see he owed his life to the tree, as did the little coppersmith. He went on to list the many medicinal uses of the tree. Its milky sap is fed to lactating mothers, used as a mouthwash to cure ulcers, the raw berries cooked as a sabji or turned into country liquor. For the tribal, one tree is like the local supermarket but one that continues to feed them even in times of famine. He also showed us how the tree's roots cross their knees and form a lap-shape under the earth.

This tree, planted near a source of stagnant water in need of drying up, can mop up this waste at great speed and convert it into a life force, oxygen. Built along the lines of a banyan, the Umri though has no supporting aerial roots. Grown close to a source of water it can attain large proportions. This obesity it combats by distributing the excess weight to higher branches, so that it balances itself with a long heavy crossbar, the same way a tightrope artist does. I leave to your imagination what would happen if the tree is unequally, and thoughtlessly, trimmed.

Associated with Lord Dattatraya, the tree is called Kalpa vruksha and is said to share a partiality for all animals with the deity. Our neighbours drop by to take its twigs for pooja. Others tell us; only a very lucky few find an Umra growing spontaneously in their garden. Soon after the first rains a magical township of mushrooms springs up under the tree, putting up umbrellas under its deep shade, climbing anthills, and setting shop on the exposed roots. During the monsoons our Umri is almost lifted into the air. Eagles, crows, hawks, and egrets blunder into its topmost branches seeking sanctuary from angry winds. The tree grows wild with the weather. It rears its green mask like a Kathakali dancer and shudders along the breath of wide-flung arms.

__Robert Frost, Tree at my window__

1. Irish illicit liquor den.
On the Yellow-throated Bulbul in Tamil Nadu, and a plea for more self-explanatory titles

Ragupathy Kannan & Douglas A. James


Ragupathy Kannan, Department of Biology, University of Arkansas at Fort Smith, Fort Smith, Arkansas 72913, U.S.A.
Douglas A. James, Department of Biological Sciences, University of Arkansas, Fayetteville, Arkansas 72701, U.S.A.

Some authors in apparent haste merely glance at a title and jump into egregiously erroneous conclusions. Sengupta (1976: 340, 1982: 71) incorrectly cited Inglis (1910: 985) as having “found the Common Myna feeding on Pied Myna (Sturnus contra).” In fact, Inglis had reported, “Common Myna feeding young of Pied Myna” (italics ours). We reported this in our monograph on the Common Myna (Kannan & James 2001).

Sometimes titles can just be wrong and the error can only be found upon close inspection of the papers. Darwin (1871: 778), quoting Horne (1869) reported, “The Female Horn-bill (Buceros)... plasters up with her own excrement the orifice of the hole in which she sits on her eggs.” Horne however was actually referring to the Indian Grey Hornbill, Meniceros briostris (now Ocyperus briostris), but which he erroneously named M. bicorinis. Darwin perpetuated the error when he incorrectly assumed Horne was describing the Great Hornbill Buceros bicornis! (James & Kannan 2007).

Most titles that start with “Unusual nest of...” could be reworded to reflect how unusual the nest was. Bhardwaj et al. (2008) could have titled their paper simply, and more effectively, “Crested Bunting Melophas lathami nesting in a low bush.” If the author(s) feels compelled to refer to the anomalous nature of the nest in the title, some clever choice of words may help, like “An unusual bush-nest of the Crested Bunting...” See Bradley & Cooke (2001) for an example of such a title in the literature.

Errors that enter published literature are very difficult to expunge or rectify. Titles that convey the gist of the findings are more likely not to be misinterpreted. “Wild Great Hornbills do not use mud to seal nest cavities” (James & Kannan 2007) is much better than a nebulous, “On the nest sealing material used by wild Great Hornbills”. Similarly, “House Sparrows associated with reduced Cliff Swallow nesting success” (Leasure et al. 2010) is much less likely to be misconstrued than the standard, “Effect of House Sparrows on the nesting success of Cliff Swallows.” Both these papers do not force the researcher to hunt down the entire paper. Although reading the whole paper is always advisable, stating the main finding unequivocally, whenever possible, in the title, reduces the likelihood of the paper being misinterpreted by someone who did not (or could not) access the entire document.

References


More Indian birds Red-listed ...

BirdLife International (BLI) has shown interest this year in some of the “splits” proposed in The Ripley Guide (Rasmussen & Anderton 2005), and a re-evaluation of conservation status was requested through the Globally Threatened Forums. As a result of the information pooled in, few of the Western Ghats endemic birds got re-listed, and these been provisionally published. The two subspecies of White-bellied Shortwing Brachypteryx major have been re-evaluated and the northern form, now renamed Nilgiri Blue-Robin Myioma major, classified as “endangered” while the southern form remains in the old super-species as “vulnerable”. Newly lumped Black-chinned Laughingthrush Strophocincla cachinnans retains the “endangered” conservation status of its nominate form (formerly Nilgiri Laughingthrush) while Kerala Laughingthrush S. fairbanki, now strictly delimited south of the Palghat Gap, is elevated to “vulnerable”. Other major updates include the elevation of the Western Ghats endemic Grey-headed Bulbul Pycnonotus priocephalus, and the migrant wader Great Knot Calidris tenuirostris to “near-threatened”. (www.birdlife.org)

Save migratory birds in crisis – every species counts!

This is the theme of the World Migratory Bird Day (WMBD) celebrated on 8–9 May 2010, an initiative started in 2006 as an annual awareness campaign highlighting the need for protection of migratory birds and their habitats. United Nations has declared 2010 the International Year of Biodiversity, and consequently WMBD focuses on Globally Threatened Migratory Birds, especially those 31 migratory bird species, which are classified as Critically Endangered in the IUCN Red List. Migratory birds rely on several different habitats; they need different locations for breeding and raising their young, and for feeding. Some of them migrate up to thousands of kilometers to find suitable areas and cross many different habitats, regardless of political borders. Thus, saving migratory birds saves the habitats they require, which benefits other species as well. WMBD activities take place in many different countries and places, but are all linked through a single global campaign and theme. At the moment 192 birds are classified as Critically Endangered as a result of habitat loss, hunting, pollution, climate change, human disturbance and other reasons. Without immediate action, many of these endangered species will not be here in a few years time. Some of the key bird species that have received attention during the celebration are Balearic Shearwater Puffinus mauretanicus, Slender-billed Curlew Numenius tenuirostris, New Zealand Storm-petrel Oceaniae maorianus, and Rueck’s Blue-flycatcher Cyornis ruckii. (www.worldmigratorybirdday.org)

Tracking Amur Falcon migration

Black Storks Ciconia nigra, Black-tailed Godwits Limosa limosa, and now Amur Falcons Falco amurensis are being tracked by scientists using satellite telemetry. A number of these falcons have been fitted with tiny 5 g transmitters in South Africa early this year. Now, the first bird has been located, in early May, in China east of Mongolia and scientists wonder if they will continue further north. The diminutive raptor has already flown more than 13,750 km in seven weeks, sometimes covering over 1,000 km in a single day. Scientists found that the route differed from what has been speculated in all the handbooks. More details on the migration shall be revealed during the upcoming conference on Asian Raptors. (www.raptor-research.de)

The day of the sparrow

The first World House Sparrow Day (WHSD) was celebrated on 20 March 2010, and focused on raising awareness about the decline of the House Sparrow Passer domesticus throughout the world, and discussed the problems faced by the bird in its daily fight for survival. This is an international initiative by Nature Forever Society in collaboration with Bombay Natural History Society, Eco.Sys Action Foundation (France), Avon Wildlife Trust (UK), and other national and international organisations across the world. Acting as a flagship species, House Sparrow symbolises biodiversity found in and around urban spaces and draws attention towards the conservation and monitoring of common species. More than 180 individuals and organisations from different parts of the world joined the celebrations this year by conducting common bird-watching trips, public discussions, exhibitions, presentations, bird rallies, art competitions, and educational and public events, all aimed at paying more attention to the birds in their neighborhood, and their conservation. (www.worldhousesparrowday.org)

Bird races & statistics

Bird races are fun events and are generally not meant for statistical records. However, an attempt was made by Mike Prince at Bangalore to derive patterns from the team logbooks of HSBC Bangalore Bird Race 2010. Though quite an involved exercise with lots of private correspondence, some sensible patterns emerged, which might be of local importance. Compared to other bird races, it was found that the percentage of bird species seen by the winning team (63%) is against the total number of species seen by all teams comparatively low. It probably means that all the ‘good’ habitats in Bangalore are farflung, and that it is impossible to visit all of them on a single day, cutting across the busy city traffic. The following species were recorded by all 33 teams indicating them to be the commonest during the race; Little Green Bee-eater Merops orientalis, Rose-ringed Parakeet Psittacula krameri, Brahminy Kite Haliastur indus, Little Cormorant Phalacrocorax niger, Purple Sunbird Cinnyris asiaticus, Black Drongo Dicrurus macrocercus, House Crow Corvus splendens, and Jungle Myna Acridotheres fuscus. Similarly a percentage abundance figure was also arrived for all the 238 species recorded during the race. A similar analysis has been attempted during the first Kerala Bird Race to obtain the commonest species in each of the three cities. Bird race takes a whole lot of birdwatchers out on a single day – the data generated at least could be used for monitoring common bird species (Bngbirds).
From the field

John Gregory reported a male Western Tragopan Tragopan melancephalus, Cheer Pheasant Catræus wallichii, eight Koklass Pheasants Pucrasia macrolopha, and up to 50 Himalayan Monals Lophophorus impejanus during a weeklong trip to Great Himalayan National Park in early May (Ornibird).

Gini George and others reported an unusual “laughing call” of Malabar Parakeet Psittacula columboidea from Idamalayar, Kerala on 1 May 2010. They also reported Ceylon Frogmouth Batrachostomus moniliger, Grey-headed Bulbul, and White-bellied Treepie Dendrocitta leucogastra among other birds from Idamalayar & THATTEKKAD (Keralabird)

S Chandrasekaran discovered a nesting colony of White-rumped Vultures Gyps bengalensis at Mangalapatti in Moyar River valley, Satyamangalam, Tamil Nadu during April 2010. The nesting site had about 20 nests and augments the known vulture nest sites in this belt spread across the three southern states of Tamil Nadu, Karnataka, and Kerala (www.hinduonline.net).

David Raju reports many specialties from north-eastern India during his 10-day trip in early April—a Jerdon’s Baza Aviceda jerdonii was spotted in Gibbon Sanctuary; Red-billed Leiothrix Leiothrix julia, Chestnut-crowned Warbler Seicercus castaniceps, White-browed Shrike-Babbler Pteruthius flavicicicus, Small Niltava Niltava macgrigiariae, Rufous Sibia Heterophasia capistrata, Grey-sided Laughing-thrush Drygornestes caerulatus, Spot-winged Grosbeak Mycerobas melanoxanthos, Little Bunting Emberiza pusilla, Small-billed Scaly Thrush Zoothera dauma, Cutia Cutia nipalensis, and Dark-sided Flycatcher Muscicapa sibirica from Sikkim; a nesting pair of Silver-breasted Broadbill Serilophus lunatus, Thick-billed Green Pigeon Treron curvirostra, Rosy Minivet Pericrocotus roseus, Pale-capped Pigeon Columba punicea, and Wreathed Hornbill Aceros undulates from Manas; Pied Falconet Microhierax erythropus, White-winged Duck Cairina scutulata, and Abbott’s Babbler Malacocincla abbotti from Nameri; Yellow-breasted Bunting Emberiza aureola, Swamp Francolin Francolinus gularis, Pied Harrier Circus melanoleucus, and a pair of Bengal Francolin Houbaropsis bengalensis at Kasiranga (birdsofNEIndia).

Sayam Chowdhury and others reported 25 Spoon-billed Sandpipers Euryrhythynchus pygmeus, 24 Nordmann’s Greenshanks Tringa guttifer, and 450 Great Knots from Sonadia Island, Bangladesh early March 2010 (Ornibirding).

Rahul Anand reported an incidence of nest parasitism when he saw a Common Hawk-Cuckoo Hierococcyx varius chick being fed by a group of Yellow-billed Babblers Turdoides affinis at Kannur, Kerala during last week of March 2010 (Keralabird).

A Black Baza Aviceda leuphotes, on passage, was photographed by James Williams from Galibore fishing camps on 11 April 2010; this is the second time that this species was reported from Bangalore area during spring passage.

Five to seven Orange-bred Green-Pigeons Treron bicincta were photographed from Tambaram, Chennai on 10 March 2010 by P. Hopeland, while Vivek Chandran and Seshadri K S reported photographed three of this species on Dichinerry university campus on 20 February 2010. They also photographed Paddyfield Warbler Acrocephalus agricola and White-winged Thrush Chlidonias leucopterus from Kalliveli marshes, TamilNadu (Tamilbirds).

H Rudresh reported a Jungle Crow Corvus macrorhynchos burying an egg in mud and covering it with dry leaves and stones. Crows are known to cache their finds, mainly food, and return to the same spots later to claim their loot! (Bngbirds).

During a field visit to Nagaland in late April 2010, Sumit K. Sen and Bikram Grewal reported goodies like Grey Sibia Heterophasia gracilis, Red-headed Laughing-thrush Trochlear coromanda erythrocephalum, and Flavescent Bulbul Pycnonotus flavescens among other birds (www.kolkatabirds.com).

Ramki provided a glimpse of Bengal Floricans in breeding courtship with excellent photographs from Manas where he spotted not less than ten birds, all of them within half a kilometer of each other (IndiaNatureWatch).

Geetha Radhakrishnan and others reported a flock of seven Ashy Minivets Pericrocotus divaricatus from Theosophical society area, Chennai during first week of April (Tamilbirds).

Rarest through lens

A new international photo competition covering the world’s 623 most threatened birds has been launched. This is a follow-up to the photo competitions that led to the production of the highly acclaimed Rare Birds Yearbook 2008, and 2009. The photos submitted for the new competition will feature in a landmark publication – The World’s Rarest Birds – that will be produced by the not-for-profit publisher WILDGuides next year. The proceeds will be donated to BirdLife International’s Preventing Extinctions Programme, as was the case with the Rare Birds Yearbooks. The World’s Rarest Birds will be a lavishly illustrated hardback book, covering the 362 species categorised as Endangered, 65 that are Data Deficient, 192 Critically Endangered species, and the four species that are Extinct in the wild, and only now exist in captivity. It will be a comprehensive directory of the world’s most threatened bird species and include specially written feature articles on the key bird conservation issues in each of the world’s regions. At a local level, it would interest many of our photographers that five of ‘our’ vultures, Great Indian Bustard, two of ‘our’ floricans, Black-chinned Laughing-thrush, White-winged Duck, Greater Adjutant, and Jerdon’s Courser are listed amongst the sought-after birds. (www.birdlife.org)
**Correspondence**

*Goats and the Narcondam Hornbill Aceros narcondami*

“A group of eight including ornithologists visited Narcondam Island between 13 and 16 April 2010. We spent about 22 hours on the island and can confirm that we neither saw a goat, goat trail, or droppings during this time. We followed different paths—along a stream that provides water to the police camp, a trail that skirted along the north to a beach opposite Pigeon Island, and a path from the police camp up a 430 m hill. We also climbed this hill from the north-western side. Access to much of the rest of the island is reportedly treacherous with loose rocks that make climbing up in single file a dangerous proposition, so it would be hard to ascertain how many goats remain. We also circumnavigated the island almost twice by boat and did not see any goats.

“Apparently some of the policemen stationed there saw two goats during the previous week. There is water in the upper reaches of the stream (we climbed up as far as a waterfall), which may sustain the goats. While the hardest part of the job is getting the last few that remain, there is no doubt that these should be removed before they re-colonize the island. The principle is that this goat would eventually join up with the rest, making it easier to locate them. Nevertheless, acting on the recommendation of ornithologists, the administration, and police need to be commended for doing a reasonably good job of removing the goats.”

— Tasneem Khan
— Janaki Lenin
— Umeed Mistry
— Divya Mudappa
— T. R. Shankar Raman
— Kalyan Varma
— Rom Whitaker

**Cover of Indian Birds vol. 5, no. 6**

The Shaheen’s *Falco peregrinus* prey in the cover photograph of *Indian Birds* vol. 5 no. 6, is a Northern Shoveler *Anas clypeata* and not a Common Teal *A. crecca*, as captioned. The wings and mirror clearly point to the former; moreover, the latter does not have pinkish legs.

— Harkirat S. Sangha

—Indian Birds—

*Indian Birds* has completed five years: five volumes, 30 issues, 956 pages, 529 colour photographs, and 430-odd papers, notes, letters, columns, etc. The support of its well-wishers—ornithologists who’ve sent write-ups, and waited patiently for our response, photographers who’ve donated pictures without any reservations or demands, referees who’ve responded with alacrity to repeated email queries, and sponsors who bolstered our sagging finances—all have made this a reality. Yet all this effort would have been naught but for our enthusiastic readership that supports a printed journal even in these times of instant gratification by publication on the Internet. I thank all of you for making *Indian Birds* what it is.

The number of subscribers remains a concern. If you have not renewed your subscription, please do so (you could send me an email to enquire your subscription status). If you have, please recruit another reader for *Indian Birds*. If you can support through advertisements, do contact us.

Woodpeckers always spark ripples of excitement among birdwatchers. They are one of my favourite group of birds, and I’ve had my woodpecker moments—birding with friends in the forests around Dehradun, five species darting from one tree trunk to another, the still, humid air resounding with their whirring wings, their energetic Morse code tapping, their manic laughter; and we, mesmerised, simply rotated with their gyrations, as though locked in an incomprehensible cosmic spiral. In this issue, Arun Singh studies the role of woodpeckers in the control of the forest destroying sal heartwood borer.

We have a mixed sheaf of articles for you in this issue of *Indian Birds*—White-naped Tit, wetlands in Bihar, a surprise occurrence of Thick-billed Green-Pigeon in Orissa, Lesser Florican in Rajasthan, kleptoparasitism, etc.

Enclosed with this issue is the index to volume 5. Happy reading!

— Aasheesh Pittie

Don’t miss *Indian Birds* — RENEW YOUR SUBSCRIPTION NOW

---

Suniltanwar

Indian Birds has completed five years: five volumes, 30 issues, 956 pages, 529 colour photographs, and 430-odd papers, notes, letters, columns, etc. The support of its well-wishers—ornithologists who’ve sent write-ups, and waited patiently for our response, photographers who’ve donated pictures without any reservations or demands, referees who’ve responded with alacrity to repeated email queries, and sponsors who bolstered our sagging finances—all have made this a reality. Yet all this effort would have been naught but for our enthusiastic readership that supports a printed journal even in these times of instant gratification by publication on the Internet. I thank all of you for making *Indian Birds* what it is.

The number of subscribers remains a concern. If you have not renewed your subscription, please do so (you could send me an email to enquire your subscription status). If you have, please recruit another reader for *Indian Birds*. If you can support through advertisements, do contact us.

Woodpeckers always spark ripples of excitement among birdwatchers. They are one of my favourite group of birds, and I’ve had my woodpecker moments—birding with friends in the forests around Dehradun, five species darting from one tree trunk to another, the still, humid air resounding with their whirring wings, their energetic Morse code tapping, their manic laughter; and we, mesmerised, simply rotated with their gyrations, as though locked in an incomprehensible cosmic spiral. In this issue, Arun Singh studies the role of woodpeckers in the control of the forest destroying sal heartwood borer.

We have a mixed sheaf of articles for you in this issue of *Indian Birds*—White-naped Tit, wetlands in Bihar, a surprise occurrence of Thick-billed Green-Pigeon in Orissa, Lesser Florican in Rajasthan, kleptoparasitism, etc.

Enclosed with this issue is the index to volume 5. Happy reading!

— Aasheesh Pittie

Don’t miss *Indian Birds* — RENEW YOUR SUBSCRIPTION NOW

---

Suniltanwar