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Breeding of Black Bulbul
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Books

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

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

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

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

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

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

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

Manakadan, R., & Pittie, A. 2001. Standardised common and scientific names of the birds of the Indian Subcontinent. *Buceros* 6 (1): i-ix, 1-38.

Naoroji, R. 2006. *Birds of prey of the Indian Subcontinent*. New Delhi: Om Books International.

Ripley, S. D. 1982. *A synopsis of the birds of India and Pakistan together with those of Nepal, Sikkim, Bhutan and Ceylon*. 2nd ed. Bombay: Oxford: Bombay Natural History Society; Oxford University Press.

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

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

Spierenburg, P. 2005. *Birds in Bhutan. Status and distribution*. Bedford, U.K.: Oriental Bird Club.

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Aims & Objectives

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

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Reproductive biology of the Square-tailed Black Bulbul *Hypsipetes ganeesa* in the Western Ghats, India

P. Balakrishnan

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Abstract

Black bulbuls (genus: *Hypsipetes*) are a poorly known group of passerine birds, distributed widely in Africa and southern Asia. In this article, I provide the first detailed examination of the reproductive biology of Square-tailed Black Bulbul *Hypsipetes ganeesa* based on 81 nests studied in Silent Valley National Park, Western Ghats, southern India, from 2003 through 2005. Breeding occurred from January to June with peak egg laying during April–May. The small open-cup nests were placed 1.2–11 m off the ground in trees 2–15 m tall. Black Bulbul used ten plant species as nest substrates, with about half of the nests placed together in *Glochidion ellipticum*, and *Wendlandia notoniana*. Clutch size was two in more than 96% of nests. Incubation, and nestling periods were 13, and 12 days, respectively. Overall nest success rate was 12.84%. Egg, and nestling predation were the main causes of nest failures. In general, most life history traits of the Square-tailed Black Bulbul were similar to those reported for other members of the family; however, this comparison is constrained by the paucity of information on the breeding biology of most *Hypsipetes* species, and indicates the need for further studies of life histories in the genus.

Introduction

The family *Pycnonotidae* (bulbuls) is a large group of passerines of the Old World tropics comprising 138 species and 355 taxa, widespread in southern Asia, Africa, Madagascar, and islands of the western Indian Ocean (Sibley & Monroe 1990; Fishpool & Tobias 2005). Of the 27 genera currently treated within the family, 11 are exclusively Asian, and 14 are restricted to Africa, and islands of the western Indian Ocean (Fishpool & Tobias 2005). The genus *Hypsipetes* is treated as a complex of seven species, collectively known as 'black bulbuls' that occur in islands of the Indian Ocean, and continental Asia, from Madagascar to central China (Gregory 2000; Fishpool & Tobias 2005). All the Asian mainland forms are lumped together under the polytypic species *Hypsipetes leucocephalus*, but the isolated races of southern India (*ganeesa*) and Sri Lanka (*humii*) are presently treated as the Square-tailed Black Bulbul *H. ganeesa* (Fishpool & Tobias 2005; Rasmussen & Anderton 2005). Apart from comprehensive molecular studies (Pasquet *et al.* 2001; Moyle & Marks 2006), information on the life histories, and morphological characteristics of all members of the genus may help in elucidating the phylogenetic relationships among taxa, and also to understand the selective pressures acting on the biology of individual species. However, little is known about the biology and ecology of *Hypsipetes* bulbuls.

The aim of the present study was to provide a detailed description of the breeding biology of Square-tailed Black Bulbul (Fig. 1) distributed throughout the Western Ghats in southern India. The Square-tailed Black Bulbul is a locally abundant and resident species that shows regular seasonal altitudinal movements (Ali & Ripley 1987; Raman 1999). It inhabits wet evergreen forests and sholas from 1,000 m to the top of the hills, and also occurs in eucalyptus, shade coffee, tea, and cardamom plantations. It is a conspicuous bird with slate-grey to black body, black crest, slightly forked tail; and red bill, legs and feet (Ali & Ripley 1987). The breeding biology of this species is poorly known

and only limited characteristics of the nests and eggs have been described (Baker 1932; Ali & Ripley 1987; Fishpool & Tobias 2005). Here, I present data on breeding season, nest characteristics, clutch sizes, developmental periods, breeding success, and causes of nest failures, and compare this information with available data for other *Pycnonotids*.

Materials & methods

Study area

The study was conducted from 2003 through 2005 breeding seasons (January–June) in the core areas of Silent Valley National Park (11°00'–11°15'N 76°15'–76°35'E; 90 km², 600–2,383 m above sea level) in the Western Ghats, India. The breeding habitat of the species is mainly located on the northern slopes of the park, at altitudes ranging from 1,100 to 2,300 m above sea level. The



Fig. 1. Incubating Square-tailed Black Bulbul *H. ganeesa*.

P. Balakrishnan



P. Balakrishnan

Fig. 2. Nest and nestlings of Square-tailed Black Bulbul.

dominant vegetation types at these elevations are west coast tropical evergreen forest, southern subtropical broad-leaved hill forest, and southern montane wet temperate forest (shola forests) interspersed with savannah woodlands and montane grasslands. Dominant tree families in the study sites were Lauraceae, Euphorbiaceae, Myrtaceae, Clusiaceae, and Myristicaceae (Manilal 1998; Das 2008). Mean minimum and maximum daily temperatures during the study were 19.83°C and 25.78°C, respectively. Annual rainfall ranged from 4,900 to 8,260 mm, with more than half of it occurring during the south-west monsoon (May–September).

Nest searching & monitoring

The breeding population of the Square-tailed Black Bulbul arrived at the study sites by late December (first sighting dates were 23.xii.2003, and 30.xii.2004 for the 2004 and 2005 breeding seasons respectively), and moved to the lower altitudes by early June. I searched for nests during 2003 through 2005. Nests were located by following individuals carrying nesting material or food to the nests, based on other behaviour cues, and by searching vegetation. Once found, I monitored nests every 1–2 days, and everyday during the transition of nesting stages to determine the clutch size, start and duration of the developmental periods (incubation and nestling) and the fate of the nest. Nests accessible from the ground were monitored by direct observation. I used a pole and mirror to check the contents of higher nests. Standard protocols were followed during nest monitoring to minimize disturbance to birds, and habitat, and prevent observer-induced nest predation

(Martin & Geupel 1993; Balakrishnan 2007). Timing of breeding was determined by pooling the number of clutches initiated per month for all the three breeding seasons. Clutch initiation dates were determined either by direct observation of the egg laying or by calculations made using the known hatching dates and mean developmental periods. For the calculation of the developmental periods, I used only those nests whose breeding stage transitions could be observed directly. Nests that produced at least one young were considered successful. Hatching, nestling, and breeding success were defined as the probability that eggs laid would hatch, the probability that hatchlings would fledge, and the probability that eggs laid would survive from laying to fledging, respectively. I measured inner diameter, external diameter, and height and depth of nests to the nearest centimeter in the field, and cup thickness, cup volume and material volume were calculated from these measurements (Soler *et al.* 1998; Balakrishnan 2007). Nest height, plant species, and height of the nest substrate were recorded immediately after the fledging of the young or their predation. Orientation of the nest around the substrate plant was recorded to the nearest degree using a Suunto MCA-D compass.

Data analysis

To compare the relationship between breeding seasonality and climatic variables, I used meteorological data from the Walakkad forest station of the Kerala Forests and Wildlife Department. The nonparametric Spearman's rank correlation was used to evaluate the relationship between clutch initiations per month, and climatic

variables. Variation in the nest placement attributes among breeding years, and successful and failed nests were analyzed with univariate ANOVA. I used nonparametric Watson one-sample U^2 tests for circular distributions to test for uniform distributions of nest orientations (Zar 1999).

Daily nest survival rates were estimated using the Mayfield method (Mayfield 1961, 1975). Exposure days were calculated from the interval between the day the first egg was laid or the day the nest was found if after laying, and the day of fledging. For failed nests, the date of failure was estimated as the mid-point between the date the nest was last known to be active and the date it was found to have failed. Daily survival rates and nest success were calculated separately for the incubation, nestling, and overall nesting stages, and breeding seasons. Standard errors for survival rates were calculated as described in Johnson (1979). Reported values are mean \pm SD for all measurements unless otherwise indicated. All tests were two tailed, and differences were considered significant at $P < 0.05$. All statistical analyses were performed by using SPSS 10.0 (SPSS Inc.) and Oriana 2.0 (Kovach Computing Services).

Results

Timing of breeding

I located and monitored a total of 81 active nests of the Square-tailed Black Bulbul in Silent Valley National Park during 2003

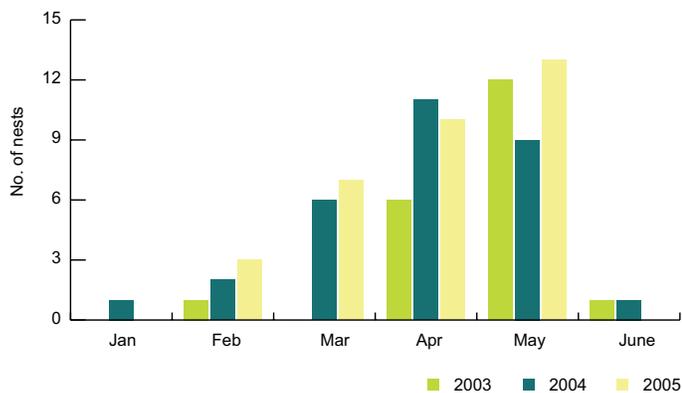


Fig. 3. The number of Square-tailed Black Bulbul nests initiated per month ($n = 81$ nests from the 2003 to 2005 breeding seasons).

through 2005 breeding seasons. All the nests were found within an altitude range of 1,210–2,050 m. The breeding season started in January–February and ended in early June, by the onset of heavy monsoon. First egg laying dates were 17 February, 26 January, and 20 February for the 2003, 2004, and 2005 breeding seasons respectively. Peak egg laying was observed during April–May (Fig. 3). The number of clutches initiated per month was not correlated with the monthly rainfall ($r_s = -0.043$, $P = 0.824$) and number of rainy days per month ($r_s = -0.021$, $P = 0.915$), but weakly correlated with the maximum temperature ($r_s = 0.418$, $P = 0.024$, $n = 29$).

Nest characteristics and placement

Square-tailed Black Bublubs build cup-shaped nests out of grasses, dead leaves (*Glochidion ellipticum*, *Oreocnide integrifolia*, *Symplocos*

cochinchinensis, and *Wendlandia notoniana*), plant fibers, moss, lichens, and cobwebs, decorated with dry moss, and rarely, spider cocoon, and bark pieces. The internal linings constituted of rootlets of peridophytes and other soft materials. The measurements of nests are shown in Table 1. Both sexes participate in nest building but there is considerable variation in each sex's contribution, which is not quantified, as the population is not colour marked. Nest construction took an average of 4.43 ± 0.79 days (range = 3–5 days, $n = 7$).

Table 1. Measurements of Square-tailed Black Bulbul nests ($n = 65$ nests).

Particulars	Mean	SD	Range
Outer diameter (cm)	8.84	0.55	7.60–10.20
Inner diameter (cm)	5.54	0.52	4.70–6.80
Outer nest height (cm)	6.58	0.76	5.00–9.20
Cup depth (cm)	4.50	0.59	3.20–6.00
Nest thickness (cm)	3.30	0.36	2.20–4.00
Cup volume (cm ³)	292.71	74.61	180.34–561.42
Material volume (cm ³)	792.51	162.03	477.36–1557.81

The mean nest height was 4.42 ± 2.09 m (range = 1.2–11 m), and the mean height of trees in which nests were built was 7.01 ± 3.40 m (range = 2–15 m). The mean relative height of nests was 0.66 ± 0.17 (range = 0.25–0.92). In general, there was no annual variation in the nest (ANOVA, $F_{2,78} = 0.049$, $P = 0.952$) and relative heights ($F_{2,78} = 0.073$, $P = 0.930$). However, the successful nests had significantly low nest height compared to failed nests (mean = 3.38 ± 1.41 m vs 4.77 ± 2.17 m; $F_{1,79} = 7.094$, $P = 0.009$).

Majority of the successful nests were placed closer to the middle of the trees, and significantly varied from the failed nests which were placed in the top layer of the trees (mean relative height = 0.44 ± 0.11 vs 0.74 ± 0.11 ; $F_{1,79} = 104.438$, $P = 0.001$). Square-tailed Black Bublubs used ten plant species as nest substrates, with about half of the nests placed together in *Glochidion ellipticum*, and *Wendlandia notoniana* (Table 2). The mean (\pm SE) nest orientation of Square-tailed Black Bulbul nests was $168.29 \pm 20.07^\circ$. The nests were not distributed uniformly around the plants (mean vector (r) = 0.221, Watson's $U^2 = 0.217$, $P < 0.05$), but situated without any strong directionality in placement ($n = 81$, Fig. 3).

Table 2. Plant species used for nesting with nest placement attributes and success rate.

Plant species	Nest height in m \pm SD	Tree height in m \pm SD	No. of nests (%)	% successful	Fledged / nest
<i>Glochidion ellipticum</i>	3.53 ± 0.92	5.44 ± 1.18	21 (25.93)	33.33	0.67
<i>Wendlandia notoniana</i>	2.89 ± 1.12	4.24 ± 1.45	18 (22.22)	22.22	0.44
<i>Symplocos cochinchinensis</i>	4.72 ± 1.66	7.28 ± 2.93	9 (11.11)	22.22	0.44
<i>Clerodendrum viscosum</i>	4.14 ± 1.58	6.21 ± 2.75	7 (8.64)	28.57	0.57
<i>Syzygium palghatense</i>	5.86 ± 1.70	10.50 ± 2.50	7 (8.64)	28.57	0.57
<i>Syzygium cumini</i>	6.70 ± 2.54	11.70 ± 2.22	5 (6.17)	20.00	0.40
<i>Elaeocarpus munronii</i>	7.14 ± 1.87	13.20 ± 2.49	5 (6.17)	20.00	0.40
<i>Oreocnide integrifolia</i>	3.63 ± 1.34	5.63 ± 0.85	4 (4.94)	25.00	0.50
Unidentified species	8.67 ± 2.52	11.33 ± 2.89	3 (3.70)	0.00	0.00
<i>Schefflera stellata</i>	5.00 ± 2.12	7.01 ± 3.40	2 (2.47)	0.00	0.00

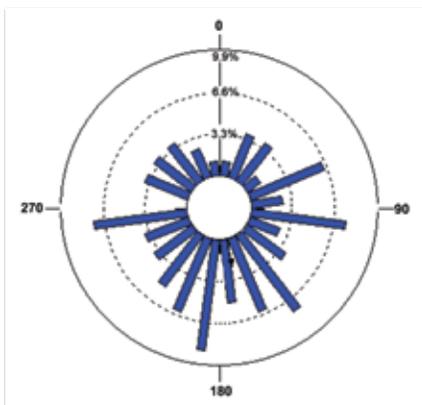


Fig. 4. Circular frequency distributions of nest placement around the nest plants ($n = 81$ nests, bin width = 15°). Dotted circles indicate scale (% of nests).

Clutch size, and duration of the incubation, and nestling periods

Mean clutch size was 2.04 ± 0.19 ($n = 81$ nests, 78 with two eggs, and three with three eggs). Eggs were laid in the morning, and the laying interval was approximately 24 hrs. The incubation period ranged from 12–13 days (mean = 12.75 ± 0.45 days, $n = 12$), and nestling period averaged 11.88 ± 0.34 days (range = 11–12 days, $n = 16$). The overall incubation and nestling periods together was 24.82 ± 0.40 days (range = 24–25, $n = 11$). Thus, the complete breeding cycle from the start of nest construction to the time when nestlings left the nest, took about a month.

Nest success & causes of failures

Of 81 active nests monitored, 24.69% fledged at least one chick. The hatching success of all eggs known was 46.06% (76 hatchlings from 165 eggs, $n = 81$ nests), and fledging success was 52.63% (40 fledged out of 76 hatched, $n = 38$ nests). Overall breeding success (% eggs fledged) was 24.24%. Daily mortality rate during the incubation period was 0.084 ($n = 512$ egg-days for 81 nests), and during the nestling period was 0.069 ($n = 262$ nestling-days for 38 nests). The daily survival rate (\pm SE) for the entire nesting period was 0.921 ± 0.010 , which equates to an overall nest success rate of 12.84%. Nest success did not vary greatly among the breeding years (Table 3).

Table 3. Mayfield daily nest survival rate and nest success of Square-tailed Black Bulbul during different breeding stages and years, Silent Valley National Park, southern India.

Reproductive period/year	Exposure days	No. of nests	No. of nests failed	Daily nest survival \pm SE	Nest success
Incubation	512	81	43	0.916 ± 0.012	31.97
Nestling	262	38	18	0.931 ± 0.016	42.57
Overall nesting	774	81	61	0.921 ± 0.010	12.84
2003	194	20	16	0.918 ± 0.020	11.63
2004	297	28	21	0.929 ± 0.015	15.99
2005	283	33	24	0.915 ± 0.017	10.91

Nest predation was high, accounting for 93% (57 of 61 nests) of all known nest failures. These nests were characterised by the complete loss of the eggs or chicks. Black-shouldered Kite *Elanus*

caeruleus was observed depredating one Square-tailed Black Bulbul's nest, and consuming its entire contents. Indian rat snake *Ptyas mucosa* was also observed depredating Black Bulbul nests at Muthikkulam reserved forest (*pers. obs.*). Other possible predators include colubrid snakes, corvids, raptors, and arboreal mammals. Two nests were destroyed when their nesting plants collapsed due to strong winds. No brood parasitism was observed in Silent Valley, however, the presence of two blue-coloured oval-shaped eggs (probably those of Pied Cuckoo *Clamator jacobinus*) in one of the Square-tailed Black Bulbul nests at Muthikkulam reserved forest (*pers. obs.*) indicates the species is parasitised.

Discussion

Pycnonotids breed at varying times of the year, and are multi-brooded. The equatorial Asian, and African species are reported to breed throughout the year, and some are known quite commonly to raise three broods in a year, and rarely up to five broods (Ali & Ripley 1987; Fishpool & Tobias 2005). However, throughout their range the breeding activities of the montane forest species tend to be suppressed during the wettest, and coldest months (Ali & Ripley 1987; Fishpool & Tobias 2005). Breeding of Square-tailed Black Bulbul in Silent Valley National Park occurred between January and June with peak breeding in April–May (>72% total clutch initiations; Fig. 3). On the other hand, co-existing bulbuls in the mid-elevation forests, such as Yellow-browed *Iole indica*, and Grey-headed Bulbul *Pycnonotus priocephalus*, breed slightly earlier. Peak breeding of Yellow-browed Bulbul was in January–February, and that of Grey-headed Bulbul was in April–March (Balakrishnan 2007). Higher levels of insectivory, compared to these two species' requirements, could be a reason for the closeness of peak breeding of Square-tailed Black Bulbul towards the monsoon, so that the peak food demand of chicks coincides with the arrival of the monsoon (Ali & Ripley 1987). Moreover, a majority of the Square-tailed Black Bulbul's egg-laying dates fall within the peak breeding months of south Indian passerines (Prasad & Yom-Tov 2000).

Nests of Square-tailed Black Bulbul are typically like those of similar species, made with materials available in the immediate vicinity of the nest sites. Nest construction period was similar (3–5 days) to the durations reported for other Pycnonotids: 2–5 days for Red-vented Bulbul *P. cafer*, 3–8 days for Yellow-throated Bulbul *P. xantholaemus*, and 3–8 days for Grey-headed Bulbul (Ali & Ripley 1987; Venkataswamappa & Chaitra 1999; Fishpool & Tobias 2005; Balakrishnan 2007). Nests were found in medium-sized trees,

mostly in the rainforest–savannah woodland edges, placed at varying heights (1.2–11 m). Similar nest placement attributes (2–15 m) were reported for the Himalayan sub-species (*psaroides*) of the Black Bulbul (Ali & Ripley 1987). Diversity of nest substrates used was too low, with strong preference for *Glochidion ellipticum*, and *Wendlandia notoniana* (Table 2). More than 96% of nests had two eggs; the remaining had three. Ali & Ripley (1987) also reported the clutch size as two, and rarely three, which is the typical range of most of the African, and Asian species of bulbuls (Fishpool & Tobias 2005). Incubation, and nestling periods of Square-tailed Black Bulbul fall within the ranges of most species of bulbuls (11–14 days) (Liversidge 1970; Vijayan 1975, 1980; Walting 1983; Ali & Ripley 1987; Hsu & Lin 1997; Krüger 2004; Fishpool & Tobias 2005; Balakrishnan 2007), but are slightly lower than those of some African pycnonotids (Safford 1996; Fishpool & Tobias 2005).

The Mayfield success rates of breeding Square-tailed Black Bulbul were 31.97% for the egg stage, 42.57% for the nestling stage,

and 12.84% for both combined. The success rates are similar to that of the Grey-headed Bulbul (10.79%), but slightly lower than that of the Yellow-browed Bulbul (17.21%) breeding at the same elevations (P. Balakrishnan, *unpubl. data*). Although nest predation rate is much higher than reported generally for tropical passerines (71%) (Robinson et al. 2000; Stutchbury & Morton 2001), most studies of Pycnonotids indicate high predation rates, often higher than 70% (Liversidge 1970; Vijayan 1975, 1980; Walting 1983; Hsu & Lin 1997; Krüger 2004; Fishpool & Tobias 2005; Balakrishnan 2007). Predation rates were higher during the egg stage than the nestling stage as reported for other species (Mermoz & Reboreda 1998; Balakrishnan 2007). Predation was the major factor limiting nesting success as reported for other open-cup nesting passerine birds (Ricklefs 1969; Martin 1993). The two predators confirmed as nest depredators were Black-shouldered Kite, and Indian rat snake. Species like common vine snake *Ahaetulla nasuta*, White-bellied Treepie *Dendrocitta leucogastra*, Greater Coucal *Centropus sinensis*, and jungle striped squirrel *Funambulus tristriatus* are also recorded as the predators of other bulbuls in Silent Valley National Park (Balakrishnan 2007). A majority of the Square-tailed Black Bulbul nests were placed high off the ground, so the role of arboreal mammals, raptors, and colubrid snakes in nest predation, and the level of brood parasitism deserve detailed investigation. A small portion of the late season nests also failed due to harsh weather.

In conclusion, the reproductive biology of Square-tailed Black Bulbul was similar in many aspects of other Pycnonotid species. However, this comparison is constrained by the lack of information on the breeding biology of most *Hypsipetes* species. Further research is needed to understand the growth rates, parental care patterns, and predators, and nest mortality rates for other populations of Black Bulbul along their distribution range. This would greatly benefit in understanding the geographic diversity of avian reproductive traits, and life history strategies in general, and to improve our understanding of the proximate, and ultimate factors that shape life-history traits of *Hypsipetes* bulbuls.

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References

Ali, S. & Ripley, S. D. 1987. *Handbook of the birds of India and Pakistan together with those of Bangladesh, Nepal, Bhutan and Sri Lanka*. Compact ed. New Delhi: Oxford University Press.

Baker, E. C. S. 1932. *The nidification of birds of the Indian Empire*. London: Taylor & Francis.

Balakrishnan, P. 2007. Status, distribution and ecology of the Grey-headed Bulbul *Pycnonotus priocephalus* in the Western Ghats, India. PhD. thesis. Coimbatore: Bharathiar University.

Das, K. S. A. 2008. Bird community structure along the altitudinal gradient in Silent Valley National Park, Western Ghats, India. PhD. thesis. Coimbatore: Bharathiar University.

Fishpool, L. D. C. & Tobias, J. A. 2005. Family Pycnonotidae (Bulbuls). In: *Handbook of the birds of the world. Volume 10. Cuckoo-shrikes to Thrushes.*

del Hoyo, J., Elliott, A. & Christie, D. (eds.). Barcelona: Lynx Edicions. Pp. 124–253.

Gregory, S. M. S. 2000. Nomenclature of the '*Hypsipetes*' bulbuls (Pycnonotidae). *Forktail* 16: 164–166.

Hsu, M. J. & Lin, Y.-S. 1997. Breeding ecology of Styan's Bulbul *Pycnonotus taiwanus* in Taiwan. *Ibis* 139: 518–522.

Johnson, D. H. 1979. Estimating nest success: the Mayfield method and an alternative. *Auk* 96: 651–661.

Krüger, O. 2004. Breeding biology of the Cape Bulbul *Pycnonotus capensis*: a 40-year comparison. *Ostrich* 75: 211–216.

Liversidge, R. 1970. The ecological life history of the Cape Bulbul. PhD. thesis. Cape Town: University of Cape Town.

Manilal, K. S. 1988. *Flora of Silent Valley tropical rain forest of India*. Calicut: The Mathrubhumi Press.

Martin, T. E. & Geupel, G. R. 1993. Nest-monitoring plots: methods for locating nests and monitoring success. *Journal of Field Ornithology* 64: 507–519.

Martin, T. E. 1993. Nest predation and nest sites: new perspectives on old patterns. *BioScience* 43: 523–532.

Mayfield, H. 1961. Nesting success calculated from exposure. *Wilson Bulletin* 73: 255–261.

Mayfield, H. 1975. Suggestions for calculating nest success. *Wilson Bulletin* 87: 456–466.

Mermoz, M. E. & Reboreda, J. C. 1998. Nesting success in Brown-and-yellow Marshbirds: effects of timing, nest site, and brood parasitism. *Auk* 115: 871–878.

Moyle, R. G. & Marks, B. D. 2006. Phylogenetic relationships of the bulbuls (Aves: Pycnonotidae) based on mitochondrial and nuclear DNA sequence data. *Molecular Phylogenetics & Evolution* 40: 687–695.

Pasquet, E., Han, L.-X., Khobket, O. & Cibois, A. 2001. Towards a molecular systematics of the genus *Criniger*, and a preliminary phylogeny of the bulbuls (Aves, Passeriformes, Pycnonotidae). *Zoosystema* 23: 857–863.

Pramod, P. & Yom-Tov, Y. 2000. The breeding season and clutch size of Indian passerines. *Ibis* 142: 75–81.

Raman, T. R. S. 1999. Flocking behaviour and altitudinal movements of the Black Bulbul *Hypsipetes madagascariensis* in the southern Western Ghats, India. *J. Bombay Nat. Hist. Soc.*, 96: 320–321.

Rasmussen, P. C. & Anderton, J. C. 2005. *Birds of South Asia: the Ripley guide*. Barcelona: Lynx Edicions.

Ricklefs, R. E. 1969. An analysis of nesting mortality in birds. *Smithsonian Contribution to Zoology* 9: 1–48.

Robinson, W. D., Robinson, T. R., Robinson, S. K. & Brawn, J. D. 2000. Nesting success of understory forest birds in lowland Panama. *Journal of Avian Biology* 31: 151–164.

Safford, R. J. 1996. Notes on the biology of the Mauritius Black Bulbul, *Hypsipetes olivaceus*. *Ostrich* 67: 151–154.

Sibley, C. G. & Monroe, B. L. 1990. *Distribution and taxonomy of birds of the world*. New Haven: Yale University Press.

Soler, J. J., Møller, A. P. & Soler, M. 1998. Nest-building, sexual selection and parental investment. *Evolutionary Ecology* 12: 427–441.

Stutchbury, B. J. M. & Morton, E. S. 2001. *Behavioral ecology of tropical birds*. London: Academic Press.

Walting, D. 1983. The breeding biology of the Red-vented Bulbul *Pycnonotus cafer* in Fiji. *Emu* 83: 173–180.

Venkataswamappa, M. & Chaitra, M. R. 1999. Observations of nesting Yellow-throated Bulbuls. *Oriental Bird Club Bulletin* 30: 32.

Vijayan, V. S. 1975. Ecological isolation of Bulbuls with special reference to *Pycnonotus cafer cafer* and *P. luteolus luteolus* at Point Calimere, Tamil Nadu. PhD. Thesis. Mumbai: University of Bombay.

Vijayan, V. S. 1980. Breeding biology of bulbuls, *Pycnonotus cafer* and *Pycnonotus luteolus* (Class: Aves, Family: Pycnonotidae) with special reference to their ecological isolation. *J. Bombay Nat. Hist. Soc.* 75 (Suppl.): 1090–1117.

Zar, J. H. 1999. *Biostatistical analysis*. 4th ed. New Jersey: Prentice-Hall.

Hatching success in Yellow-wattled Lapwing *Vanellus malabaricus*

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Introduction

The endemic Yellow-wattled Lapwing *Vanellus malabaricus* is found in most parts of the Indian Subcontinent. It is a sandy brown plover that breeds during April–July, and lays eggs in an unlined shallow scrape on dry open fallow or waste land, sometimes encircled by a parapet of pebbles (Ali & Ripley 1998; Grimmett *et al.* 1998).

Jayakar & Spurway (1965a & b, 1968) studied some aspects of breeding biology of Yellow-wattled Lapwing, and Santharam (1980, 1995) made a few additional observations—both studies were from southern India. In the present study observations have been made on the hatching success of this species in Haridwar (northern India) with an emphasis on the factors responsible for egg-loss or nest-failure.

Methods

Study was carried out during the peak breeding months (May–June) of Yellow-wattled Lapwing in 2006 and 2007. Observations were made from considerable distance (20.88 m \pm 5.89 m, mean \pm SD) or hides using 10x50 prismatic binoculars in the scrub and wastelands of Haridwar district (29°55'N 78°08'E), Uttarakhand state (Fig. 1).

eggs from the high temperature. Searches for nests were done systematically and all parts of the study area were searched thoroughly and repeatedly. In addition, local inhabitants such as children, farmers, and cattle-grazers were regularly queried regarding the occurrence of the nest(s) of Yellow-wattled Lapwing in their premises or nearby areas.



Vinaya Kumar Sethi

Fig. 2. Yellow-wattled Lapwing incubating eggs in the study area

The clutch size of this species ranges from 3 to 4 (Fig. 3) with an incubation period of 27 to 30 days (Jayakar & Spurway 1968; Ali & Ripley 1998). Thus, nests found prior to clutch completion were inspected at intervals of 2–5 days, and more frequently during the expected dates of their hatching. Whereas, nests spotted after clutch completion were inspected invariably on alternate days at any time of the day. The colour of the eggs matches the soil to perfection. To re-spot/re-observe the nest quickly, and reduce the chance of attracting predators (Salek & Smilauer 2002), a brick with a stone on top was placed as a 'nest-marker' within a 1.5 m radius of the active nest. To minimize disturbance we did not spend more than ten seconds near the nest during inspection. A nest was assumed to be depredated when it was found empty after having previously been known to contain eggs, except when it was thought that incubation had completed and the nidifugous young moved on. It was often possible to distinguish successful and depredated nests because of parental shell removal behaviour. Empty nests containing yolk stains and large eggshell fragments, indented eggshells in the nest vicinity or, no eggshell fragments, were assumed to have been depredated (Beintema & Muskens 1987; Sordahl 1994; Hart *et al.* 2002).



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Fig. 1. Nesting habitat of the Yellow-wattled Lapwing in Haridwar, Uttarakhand, India.

Nests were found by spotting the bird—while it scraped the ground for nesting, incubating the eggs (Fig. 2), or threatening predators at nest-sites. Noon was the best time for spotting the nests as during this time nests were never left unattended and at least one of the birds was found sitting in the nests to protect the



Fig. 3. A clutch of the Yellow-wattled Lapwing in the study area.

We measured only the net change in nests, eggs, and chicks and, therefore, could estimate only the minimum number produced in each nest (Gore & Kinnison 1991). In some nests we also observed asynchronous hatching (Jayakar & Spurway 1968), which took 20–43 hrs for completion. In addition, the young started moving out of nests within a couple of hours after hatching and concealed themselves in the nearby vegetation. Inspection of such nests, from which some young had left, but which still contained un-hatched eggs, could bias data. Therefore, such nests were observed either at dawn or noon, when the bird was clearly observed incubating / brooding. The existing ground cover was generally sufficient for chicks to conceal themselves, and so, to reduce any bias in detecting chicks, we, along with two local inhabitants, observed individual nests continuously, for longer durations (up to four hours) from a blind or a vehicle—to spot fleeing chicks, and search vegetation for those that were hiding.

Hatching success was defined as the number of eggs that hatched successfully, and was calculated as a percentage on the basis of the total number of eggs laid. Chicks were summarized per nest as a proportion. Data were tested statistically using two-tailed *t*-test (Zar 1984).

Observations & results

A total of 87 hrs was spent in the field in both years. A total of 16 nests of Yellow-wattled Lapwing were observed in 2006 (N=7) and 2007 (N=9). Three- and four-egg clutches were the only clutch sizes recorded during the present study. There were two nests with three-egg clutches in 2006 and four in 2007; while five nests containing four-egg clutches were observed both, in 2006 and 2007. Thus, a larger number of nests (62.5%) had four-egg

clutches. Breeding parameters such as mean clutch size, mean number of eggs hatched, and mean number of eggs lost did not differ significantly between years (2006 & 2007), and thus the data of both the years were pooled for the assessment of hatching success (Table 1).

A total of 58 eggs were laid in 16 nests of the Yellow-wattled Lapwing, out of which 16 hatched successfully, leading to a hatching success of 27.58%. Different factors, namely predation, nest damage, and hatching failure were responsible for egg loss (Table 2).

We observed a fair difference in the behaviour of the incubating Yellow-wattled Lapwings, towards us, during different phases of their incubation period, which lasted 27–30 days. When we approached the nest during the early days of incubation, the incubating bird left the nest silently, without performing any agonistic displays (n=62 times for 9 lapwings). However, in later phase (after about 15 days of clutch completion) both adults produced alarm calls (n=128 times for 16 lapwings) (Fig. 4). The intensity and duration of alarm calls, accompanied by the diving display over us, were at a peak two–three days prior to hatching (n=57 times for 16 lapwings). Clutton-Brock (1991) has suggested that with the advancement in incubation period, the value of clutch increases for parents, and adults become more reluctant to desert nests. Similar alterations in the behaviour of incubating birds have also been reported in *V. chilensis* (Naranjo 1991) and *Recurvirostra avosetta* (Cuervo 2004).



Fig. 4. Parent Yellow-wattled Lapwing emitting alarm calls to deter predators in the study area.

Discussion

Hatching success in Yellow-wattled Lapwing nests was found low (27.58%) in the present study when compared with the earlier reported hatching success (36.84%) for the same species (Jayakar & Spurway 1968) as well as other ground nesting birds,

Clutch size [Mean±SD]		No. of eggs hatched [Mean±SD]		No. of eggs lost [Mean±SD]	
2006	2007	2006	2007	2006	2007
3.71±0.48 (n=7)	3.62±0.52 (n=9)	0.85±0.69 (n=7)	0.87±1.26 (n=9)	2.85±0.69 (n=7)	2.75±1.33 (n=9)
<i>t</i> = 0.62, <i>df</i> = 13, <i>P</i> >0.05		<i>t</i> = 0.51, <i>df</i> = 13, <i>P</i> >0.05		<i>t</i> = 0.80, <i>df</i> = 13, <i>P</i> >0.05	

Nests observed	Eggs laid	Eggs hatched	Hatching success (%)	Eggs lost	Loss of eggs (%) due to		
					Predation	Nest-damage	Hatching failure
16	58	16	27.58	42	51.73	17.24	3.45

e.g., *Charadrius bicinctus* (44%, Bomford 1978), *C. montanus* (61%, Graul 1975), *Anarhynchus frontalis* (>70%, Hay 1984), *Thinornis novaeseelandiae* (>75%, Davis 1994), *Pluvialis apricaria* (43%, Pearce-Higgins & Yalden 2003), *Recurvirostra avosetta* (89%, Cuervo 2004), *Himantopus himantopus* (94%, Cuervo 2004), etc.

It is well known that ground-nesting birds are victims of high rates of predation of their eggs and young (Armstrong 1954; Massey & Fancher 1989; Salek & Smilauer 2002), and that predation has been reported as a major limiting factor to their productivity (Newton 1994; Pearce-Higgins & Yalden 2003; Cuervo 2004). In the present study also, low hatching success of Yellow-wattled Lapwing was attributed mainly to the increased predation rate as their nests were easily accessible to a large number of predators (Table 2). It was difficult to see the actual predation of eggs, and most of the conclusions in this respect were inferential, based on circumstantial evidence.

Similar to Jayakar & Spurway (1965a, 1968), we too observed aerial (corvids and other large birds) as well as terrestrial (dog, pig, snake, mongoose, etc.) predators that caused considerable damage to the eggs of Yellow-wattled Lapwing (Fig. 5). It was not always possible to identify the predator. However, direct observations of predators attacking nests revealed that ground predators caused the loss of complete clutches (n=4), while aerial predators caused partial losses (n=5). This could be due to the reason that nesting pairs were generally unable to distract the large ground predators from the nests once they had been located. Aerial predators, however, were attacked more vigorously, and persistently, and parents often did not let them predate on the complete clutch.



Fig. 5. Predated (partially-eaten) egg of the Yellow-wattled Lapwing in the study area.

Corvids were the major aerial predators of Yellow-wattled Lapwing nests in the study area, and maximum instances of aerial encounters occurred between them and the lapwings. Corvid predation on ground-nesting birds is well documented (Elliot 1985; Parr 1993; Kis *et al.* 2000; Hart *et al.* 2002). We found parent Yellow-wattled Lapwings bold enough to distract most of the aerial predators like House Crow *Corvus splendens*, Jungle Crow *C. macrorhynchos*, Greater Coucal *Centropus sinensis*, and Black Kite *Milvus migrans* from their nests. However, attacks by a group of crows or a single Shikra *Accipiter badius* were difficult to deal with.

Other than such predatory pressures, nests of ground-nesting birds are prone to being damaged by grazing animals (Beintema & Muskens 1987, Hart *et al.* 2002) and human beings (Pfister *et al.* 1992, Gill *et al.* 2001, Fletcher *et al.* 2005).

In 2006 we observed a herd of grazing goats and sheep trampling three eggs in a nest. Also, for a number of times parents were observed aggressively threatening the grazing animals with loud alarm calls near their nests. According to Shrubbs (1990) grazing animals may depress the breeding success of birds that

settle on ground by disturbing the incubating adults thereby increasing the risk of egg loss by either predation or desertion. It has also been argued that the presence of livestock deters lapwings from settling on the ground for nesting (Berg *et al.* 1992; Elliot 1985). Hart *et al.* (2002) found that the breeding densities of Lapwing *V. vanellus* negatively correlated with the presence of livestock, and they suggested the exclusion of livestock from some areas as a desirable option in order to increase nesting success of Lapwings.

It has been suggested that human threats to ground-nesting birds, are either direct *i.e.*, damage to nest contents or young, or indirect *i.e.*, habitat destruction (Jayakar & Spurway 1968; Santharam 1995; Fletcher *et al.* 2005). In one instance, a boy who was playing cricket in the study area, unintentionally, damaged a nest of Yellow-wattled Lapwing (containing four eggs). We did not find the problem of habitat destruction affecting the nesting biology of Yellow-wattled Lapwing in our study area.

We observed two instances of hatching failure in Yellow-wattled Lapwing. Un-hatched eggs remained in the nest even after the parents had moved from the area. Hatching failure due to infertility or embryo mortality is a potentially important cause of reduced breeding success in birds, and as in the present case, has also been reported in other ground nesting birds (Byrkjedal 1987; Davis 1994).

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References

- Ali, S. & Ripley, S. D. 1998. *Handbook of the birds of India and Pakistan. Megapodes to Crab Plover*. 2nd ed. Vol. 2. Delhi: (Sponsored by Bombay Natural History Society). Oxford University Press (Oxford India Paperbacks).
- Armstrong, E. A. 1954. The ecology of distraction display. *Anim. Behav.* 2: 121-135.
- Beintema, A. J. & Muskens, G. J. D. M. 1987. Nesting success of birds in Dutch agricultural grasslands. *J. Appl. Ecol.* 24: 743-758.
- Berg, A., Lindberg, T. & Kallebrink, K. G. 1992. Hatching success of Lapwings on farmland: differences between habitats and colonies of different sizes. *J. Anim. Ecol.* 61: 469-476.
- Bomford, M. 1978. The behaviour of the banded dotterel *Charadrius bicinctus*. M.Sc. thesis, Department of Zoology, University of Otago, Dunedin.
- Byrkjedal, I. 1987. Antipredator behaviour and breeding success in Greater Plover and Eurasian Dotterel. *Condor* 89: 40-47.
- Clutton-Brock, T. H. 1991. *The evolution of parental care*. New Jersey: Princeton University Press.
- Cuervo, J. J. 2004. Nest-site selection and characteristics in a mixed-species colony of Avocets *Recurvirostra avosetta* and Black-winged Stilts *Himantopus himantopus*. *Bird Study* 51: 20-24.
- Davis, A. 1994. Breeding biology of the New Zealand Shore Plover *Thinornis novaeseelandiae*. *Notornis* 41: 195-208.
- Elliot, R. D. 1985. The exclusion of avian predators from aggregations of nesting Lapwings (*Vanellus vanellus*). *Anim. Behav.* 33: 308-314.
- Fletcher, K., Warren, P. & Baines, D. 2005. Impact of nest visits by human observers on hatching success in Lapwings *Vanellus vanellus*: a field experiment. *Bird Study* 52: 221-223.
- Gill, J. A., Norris, K. & Sutherland, W. J. 2001. The effects of disturbance on habitat use by Black-tailed Godwits *Limosa limosa*. *J. Appl. Ecol.* 38: 846-856.
- Gore, J. A., & Kinnison, M. J. 1991. Hatching success in roof and ground colonies of Least Terns. *The Condor* 93: 759-762.
- Graul, W. D. 1975. Breeding biology of mountain plover. *Wilson Bull.* 85: 7-31.
- Grimmett, R., Inskipp, C. & Inskipp, T. 1998. *Birds of the Indian Subcontinent*. New Delhi: Oxford University Press.

- Hart, J. D., Milsom, T. P., Baxter, A., Kelly, P. F. & Parkin, W. K. 2002. The impact of livestock on Lapwing *Vanellus vanellus* breeding densities and performance on coastal grazing marsh. *Bird Study* 49: 67-78.
- Hay, J. R. 1984. The behavioural ecology of the wrybill plover *Anarhynchus frontalis*. Ph.D. thesis, Department of Zoology, University of Auckland, New Zealand.
- Jayakar, S. D. & Spurway, H. 1965a. The Yellow-wattled Lapwing, *Vanellus malabaricus* (Boddaert), a tropical dry-season nester. II. Additional data on breeding biology. *J. Bombay Nat. Hist. Soc.* 62: 1-14.
- Jayakar, S. D. & Spurway, H. 1965b. The Yellow-wattled Lapwing, a tropical dry-season nester [*Vanellus malabaricus* (Boddaert), Charadriidae]. I. The locality, and the incubatory adaptations. *Zool. Jahrbuecher* 92: 53-72.
- Jayakar, S. D. & Spurway, H. 1968. The Yellow-wattled Lapwing, *Vanellus malabaricus* (Boddaert), a tropical dry-season nester. III. Two further seasons' breeding. *J. Bombay Nat. Hist. Soc.* 65: 369-383.
- Kis, J., Liker, A. & Szekely, T. 2000. Nest defence by Lapwings: observations on natural behaviour and experiment. *Ardea* 88: 155-163.
- Massey, B. W. & Fancher, J. M. 1989. RENESTING BY CALIFORNIA LEAST TERNS. *J. Field Ornithol.* 60: 350-357.
- Naranjo, L. G. 1991. Notes on reproduction of the Southern Lapwing in Colombia. *Ornitol. Neotrop.* 2: 95-96.
- Newton, I. 1994. Experiments on the limitation of bird breeding densities: a review. *Ibis* 136: 397-411.
- Parr, R. 1993. Nest predation and numbers of golden plovers *Pluvialis apricaria* and other moorland waders. *Bird Study* 40: 223-231.
- Pearce-Higgins, J. W. & Yalden, D. W. 2003. Golden Plover *Pluvialis apricaria* breeding success on a moor managed for shooting Red Grouse *Lagopus lagopus*. *Bird Study* 50: 170-177.
- Pfister, C., Harrington, B. A. & Lavine, M. 1992. The impact of human disturbance on shorebirds at a migration staging area. *Biol. Conser.* 60: 115-126.
- Salek, M. & Smilauer, P. 2002. Predation on Northern Lapwing *Vanellus vanellus* nests: the effect of population density and spatial distribution of nests. *Ardea* 90: 51-60.
- Santharam, V. 1980. Some observations on the nests of Yellow-wattled Lapwing, Stone Curlew, Blackbellied Finch-Lark and Redwinged Bush-Lark. *Newsletter for Birdwatchers* 20 (6-7): 5-12.
- Santharam, V. 1995. Some observations on the ground nesting birds at the Adyar Estuary, Madras. *Newsletter for Birdwatchers* 35 (2): 24-25.
- Shrubbs, M. 1990. Effects of agricultural change on nesting Lapwings *Vanellus vanellus* in England and Wales. *Bird Study* 37: 115-127.
- Sordahl, T. A. 1994. Eggshell removal behaviour of American Avocets and Black-necked Stilts. *J. Field Ornithol.* 65: 461-465.
- Zar, J. H. 1984. *Biostatistical Analysis*. New Jersey: Prentice-Hall.

Brown-breasted Flycatcher *Muscicapa muttui*: a new record for Gujarat

J. K. Tiwari & Maulik Varu

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On the Indian Subcontinent the Brown-breasted Flycatcher *Muscicapa muttui* breeds in north-eastern India, and winters in south-western India, and Sri Lanka (Grimmett *et al.* 1998).

On 24 October 2007 Hans and Magda Sigg (Swiss birders), and the first author spotted a Brown-breasted Flycatcher in the groves of Pingleshwar temple (23°5'N 68°48'E), located on the southern coast of Kachchh, Gujarat (India).

The flycatcher had a white throat, brown breast-band, flesh-coloured legs, and yellow lower mandible, as described in Kazmierczak (2000). Photographs of the bird were sent to Bill Harvey, Uffe Sørensen, and Krys Kazmierczak, who confirmed the identification (*pers. comm.*, November 2007). There appears to be no record of this species from Gujarat (Rasmussen 2005).



Brown-breasted Flycatcher *Muscicapa muttui*, Pingleshwar, Gujarat.

Maulik Varu later reported (24 October 2008) this species from Chaduva reserved forest in Kachchh, Gujarat, which is c.60 km from Pingleshwar; participants of Bombay Natural History Society's nature camp at Chaduva also spotted one on 19 December 2009. These records from Kachchh, besides being an addition to the avifauna of Gujarat state, greatly extend westward the known distribution of the Brown-breasted Flycatcher. In the absence of more and regular sightings, it would be prudent to suggest that the above sightings are of vagrant birds. However, birdwatchers need to be alert to the possibility of these birds occurring towards the west of their known migratory route in peninsular India.

Acknowledgements

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References

- Grimmett, R., Inskipp, C., & Inskipp, T., 1998. *Birds of the Indian Subcontinent*. 1st ed. London; Christopher Helm, A & C Black.
- Kazmierczak, K., 2000. *A field guide to the birds of India, Sri Lanka, Pakistan, Nepal, Bhutan, Bangladesh and the Maldives*. New Delhi: Om Book Service.
- Rasmussen, P. C., & Anderton, J. C., 2005. *Birds of South Asia: the Ripley Guide*. 2 vols. Washington D.C. & Barcelona: Smithsonian Institution & Lynx Edicions.

Birds of Sirumalai, Tamil Nadu: 1980–2009

Kevan Bundell

Bundell, K. 2010. Birds of Sirumalai, Tamil Nadu: 1980–2009. *Indian Birds* 5 (5): 143–145.

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Introduction

This paper reports the birds observed in Sirumalai (Little Hills) in the Dindigul district of Tamilnadu by the author in the years 1980, and 2009. It includes observations reported by Swami (2006), and additional reports by local informants to the author in 2009. It also makes reference to a list of the birds of the Palani Hills published by the Palani Hills Birdwatchers Society¹.

The author was privileged to stay in the village of Sirumalai Palaiyur for a period of eight months, from January to August, in 1980, and to return for a period of five days in January 2009.

In geological terms it would seem that Sirumalai is one of the southernmost outposts of the Eastern Ghats.² However, in terms of its location, it is close to the Western Ghats, and more particularly to the spur of the Palani Hills, from which it is separated at the narrowest point by a distance of only 12 km or so. Although Sirumalai has been studied in some detail in terms of its flora (Pallithanam, 2001; Karuppusamy *et al.* 1999; Kottaimuthu *et al.* 2008), there seems to be little of substance published on its fauna in general or, other than Swami (2006), on its birds in particular.

Sirumalai lies to the north of Madurai, and to the south of Dindigul. The surrounding plain lies at an average height of about 300 m. Sirumalai, roughly speaking, consists of an outer ring of hills at an average height of about 1,000 m, though with a number of peaks exceeding 1,350 m, and a central bowl at about 700 m. The hills rise more or less abruptly from the plain in the north, west, and south while tapering away into low hills to the east. Much of the hills are reserved forest, including areas of more or less natural dry evergreen and semi-evergreen forest; some is coffee, and other plantation, often with mature, planted tree cover; and the remainder is cultivated by local smallholder agriculturalists or larger landowners. Three main streams run through the hills, and down to the plains. Sirumalai receives its only significant rainfall between October and December with the NE Monsoon.

Environmental changes: 1980–2009

There has been a noticeable increase in forest cover in Sirumalai since 1980, particularly in the interior. This is despite some recent clearance for new farms, including for the growing of cut flowers. This increase is presumably at least partly the result of the efforts of the forest department. It is certainly the case that timber is no longer being extracted by the lorry-load, often illegally, to the extent it was in 1980. It may also be due in part to older small holdings, many of which were recently cleared in 1980, now having more trees, both for fruits, and to provide shelter for growing coffee. The arrival of a viral disease of bananas in the late 1980s or early 1990s may also have contributed. Sirumalai is locally well known for its small, sweet hill bananas, which were grown both by smallholders and in monocrop plantations. Unlike coffee, the bananas do not require shade, and their cultivation therefore led to clearing of forest, and scrub. However, banana cultivation is now much reduced. There has also been an increase in forest cover on

the Northern-most slopes of Sirumalai, where the only road into the hills winds up from the plains South of Dindigul. However, the remaining outer slopes of the hills remain semi-denuded as a result of firewood collecting by people from the surrounding villages on the plains.

Identification, naming & listing

In the table below, a full list of the birds of Sirumalai, both, reported by others, and observed by myself, is given in the first column, following Manakadan & Pittie (2002). The additional columns require further explanation:

When I arrived in Sirumalai in January 1980, on my first visit to India, from the UK, I was a reasonably experienced birdwatcher in terms of UK birds, but I had no illustrated field guide to Indian birds to assist me with this, to me, new avifauna. Indeed no modern field guide existed at that time and I was not aware of Salim Ali's *The book of Indian birds*, any edition of which would at least have got me started. I did find a copy of Baker & Inglis (1930), but this was hardly illustrated, and was as keen to advise on how to shoot the birds as to help identify them! However, in April 1980 a copy of the then recently published *Collins Handguide to the Birds of the Indian Sub-Continent* (Woodcock 1980) arrived in the post, sent by a friend for my birthday from the UK. I mention all this because, combined with having other work to do on first arrival in Sirumalai, it meant that I did not start seriously identifying the birds I was seeing until April, and I therefore missed most of the birds that were winter visitors to the area. In 2009 I deliberately chose to visit during winter. These facts are reflected in the birds observed, as shown below.

In January 2009 I used Grimmett & Inskipp (2005) as my field guide.

The fifth column lists those birds that are not listed under Swami (2006), nor seen by me. They were identified by two local, adult, informants³ to whom I showed the illustrations in Grimmett & Inskipp (2005). One would not normally rely on identifications by non-'expert' observers, and indeed a few identifications made were clearly erroneous, for example, the Red Junglefowl *Gallus gallus*. (Another informant, an experienced hunter, confirmed that this was not correct). However, in view of the paucity of reported observations of the birds of Sirumalai I have considered it worth including these here.

With my own observations, I have indicated with a question mark where identification was uncertain.

Winter visitors are indicated thus: (W).

1 <http://phbws.org/bph.html>; accessed 8 April 2009.

2 <http://www.ecoindia.com/ghats/eastern.html>.

3 Sri B Parthasarathy of Sirumalai Palaiyur, and Sri G Sethuraj of Sirumalai Podur.

Table: Birds of Sirumalai, observed and/or reported 1980 - 2009

Species	Bundell Jan–August 1980	Swami (2006)	Bundell Jan 2009	Parthasarthy & Sethuraj Jan 2009
Indian Pond-Heron <i>Ardeola grayii</i>			S	
Oriental Honey-buzzard <i>Pernis ptilorhynchus</i>			S	
Black-shouldered Kite <i>Elanus caeruleus</i>	S			
Crested Serpent-Eagle <i>Spilornis cheela</i>			S	
Shikra <i>Accipiter badius</i>				S
Black Eagle <i>Ictinaetus malayensis</i>	S	S	S	
Mountain Hawk-Eagle <i>Spizaetus nipalensis</i>		S		
Common Kestrel <i>Falco tinnunculus</i>			S	
Grey Junglefowl <i>Gallus sonneratii</i>			S	
Indian Peafowl <i>Pavo cristatus</i>			S	
Emerald Dove <i>Chalcophaps indica</i>				S
Mountain Imperial-Pigeon <i>Ducula badia</i>				S
Rose-ringed Parakeet <i>Psittacula krameri</i>	S			
Blossom-headed Parakeet <i>Psittacula cyanocephala</i>	S			
Blue-winged Parakeet <i>Psittacula columboides</i>		S	S	
Large Green-billed Malkoha <i>Phaenicophaeus tristis</i>		S		
Greater Coucal <i>Centropus sinensis</i>			S	
Mottled Wood Owl <i>Strix ocellata</i>				S
Ceylon Frogmouth <i>Batrachostomus moniliger</i>		S		
Great Eared-Nightjar <i>Eurostopodus macrotis</i>		S		
White-breasted Kingfisher <i>Halcyon smyrnensis</i>			S	
Chestnut-headed Bee-eater <i>Merops leschenaulti</i>				S
Hoopoe <i>Upupa epops</i>	S		S	
Brown-headed Barbet <i>Megalaima zeylanica</i>	S		S	
White-cheeked Barbet <i>M. viridis</i>		S	S	
Coppersmith Barbet <i>M. haemacephala</i>	S		S	
Common? / Lesser Golden-backed Woodpecker <i>Dinopium javanense / benghalense</i>	S		S	
Heart-spotted Woodpecker <i>Hemicircus canente</i>				S
Indian Pitta <i>Pitta brachyura</i>				S
Common Swallow <i>Hirundo rustica</i> (W)			S	
Large Pied Wagtail <i>Motacilla maderaspatensis</i>				S
Grey Wagtail <i>Motacilla cinerea</i> (W)			S	
Scarlet Minivet <i>Pericrocotus flammeus</i>	S		S	
Common Woodshrike <i>Tephrodornis pondicerianus</i>	S		S	
Red-whiskered Bulbul <i>Pycnonotus jocosus</i>	S		S	
Red-vented Bulbul <i>P. cafer</i>	S		S	
Asian Fairy Bluebird <i>Irena puella</i>	S		S	
Malabar Whistling-Thrush <i>Myiophonus horsfieldii</i>		S		
Orange-headed Thrush <i>Zoothera citrina</i>	S			
Oriental Magpie Robin <i>Copsychus saularis</i>		S	S	
White-rumped Shama <i>C. malabaricus</i>				S
Indian Robin <i>Saxicoloides fulicata</i>			S	
Indian Scimitar-Babbler <i>Pomatorhinus horsfieldii</i>	S			
Jungle Babbler <i>Turdoides striatus</i>	S		S	
Common Tailorbird <i>Orthotomus sutorius</i>				S
Greenish Warbler? <i>Phylloscopus trochiloides</i> (W)			S	
Nilgiri Flycatcher <i>Eumyias albicaudata</i>		S		
Grey-headed Flycatcher <i>Culicicapa ceylonensis</i> (W)				S

Table: Birds of Sirumalai, observed and/or reported 1980 - 2009

Species	Bundell Jan–August 1980	Swami (2006)	Bundell Jan 2009	Parthasarthy & Sethuraj Jan 2009
Asian Paradise Flycatcher <i>Terpsiphone paradisi</i>	S		S	
Great Tit <i>Parus major</i>	S		S	
Velvet-fronted Nuthatch <i>Sitta frontalis</i>	S		S	
Purple-rumped Sunbird <i>Nectarinia zeylonica</i>			S	
Oriental White-eye <i>Zosterops palpebrosa</i>	S			
White-throated Munia <i>Lonchura malabarica</i>				S
Spotted Munia <i>L. punctulata</i>	S		S	
Black-headed Munia <i>L. malacca</i>				S
Common Myna <i>Acridotheres tristis</i>			S	
Black-headed Oriole <i>Oriolus xanthornus</i>		S		
Black Drongo <i>Dicrurus macrocercus</i>	S		S	
Bronzed Drongo? <i>D. aeneus</i>			S	
Greater Racket-tailed Drongo <i>D. paradiseus</i>	S		S	
Ashy Woodswallow <i>Artamus fuscus</i>	S			
Indian Tree Pie <i>Dendrocitta vagabunda</i>	S		S	
House Crow <i>Corvus splendens</i>			S	
Jungle Crow <i>C. macrorhynchos</i>			S	

Comments and comparison: 1980–2009

As an indicator of confidence in the above observations it may be mentioned that all but three of the species listed above, including all those locally reported, also appear in the list of birds of the Palani Hills published by the Palani Hills Birdwatchers Society. This list covers the neighbouring upper and lower Palani Hills but does not include observations from Sirumalai⁴. The three species not mentioned are the Ceylon Frogmouth *Batrachostomus moniliger*, the Great Eared-Nightjar *Eurostopodus macrotis*, and the Mountain Hawk-Eagle *Spizaetus nipalensis*, listed by Swami (2006)—all of which could be difficult to distinguish from similar species, which are listed (e.g., the latter from the Oriental Honey-buzzard *Pernis ptilorhynchus*).

The Malabar Parakeet *Psittacula columboides* and the Nilgiri Flycatcher *Eumyias albicaudata* – reported by Swami – are endemic to the Western Ghats⁵. This emphasises the avifaunal, if not geological, affinity of Sirumalai to this range rather than to the Eastern Ghats.

Unsurprisingly both, House *Corvus splendens*, and Large-billed *C. macrorhynchos* Crows are present in Sirumalai. However, in 1980 there were apparently no crows in the hills, and certainly none in or around the main settlements. This was not only observably true but was also well known to the local people, who held that it would be inauspicious, should a crow appear. Crows of both species were of course common on the surrounding plains at that time.

This is clearly not a complete list of the birds to be found in Sirumalai. Other than where indicated, my own observations are restricted to what I could confidently identify, so that, for example, I have omitted the swifts and martins, which accompanied the Common Swallows daily during my visit in 2009.

In other words, more work remains to be done.

Mammals

Although this is an article on the birds of Sirumalai (in a journal devoted to birds), given the paucity of available information on the fauna of these hills in general, it would seem remiss not to mention the animals observed, although most have been previously reported.

Sirumalai is well known as a home of the endangered Slender Loris *Loris tardigradus lydekkerianus*⁶, which I did not observe, but was reported to me by local informants in 1980. However, in 2009 I did observe another endangered species, which is known to be present in Sirumalai, the Grizzled Giant Squirrel *Ratufa macroura*⁷.

In 1980 I also observed Common Langur *Presbytis entellus*, Bonnet Macaque *Macaca radiata*, and Indian Porcupine *Hystrix indica*, and in 2009, Bonnet Macaque again, as well as Gaur *Bos gaurus*.

References

- Ali, S. *The book of India birds*. Bombay: B.H.N.S.
 Baker, H. R. & Inglis, C. M., 1930. *The birds of southern India*. Madras: Government Press.
 Grimmet, R., & Inskipp, T., 2005. *Birds of southern India*. London: Christopher Helm / A & C Black.
 Kottaimuthu, R., Ganesan, R., Ganesan V., & Sundaram, V. M., 2008. Enumeration of orchids of Sirumalai Hills (Eastern Ghats), Tamil Nadu, India. *Ethnobotanical Leaflets* 12: 506–512. 2008.
 Karuppusamy, S., Rajasekaran, K. M., & Kumuthakalavalli, R., 1999. Orchids of Sirumalai Hills. *J. Swamy Bot.* 16: 73–74.
 Manakadan, R. & Pittie, A. 2002. Standardised common and scientific names of the birds of the Indian Subcontinent. *Newsletter for Birdwatchers* 42 (3): 1+i–viii, 1–36.
 Swami, V. N. 2006. Birds of Sirumalai, Tamil Nadu. *Indian Birds* 2 (1): 16–17.
 Pallithanam, J. M. 2001. *A pocket flora of the Sirumalai Hills, South India*. Tiruchirappalli: The Rapinat Herbarium.
 Vikneshwaran D., Viji, M., & Lakshmi, K. R., 2008. A survey of the ethnomedicinal flora of the Sirumalai Hills, Dindigul district, India. *Ethnobotanical Leaflets* 12: 948–53. 2008.
 Woodcock, M., 1980. *Collins handguide to the birds of the Indian Sub-continent*. London: Collins.

4 Dr A David Ravindran, PHBWS President, personal communication.

5 BirdLife EBA Factsheet 123, Western Ghats <http://www.birdlife.org/datazone/ebas/index.html?action=EbaHTMDetails.asp&sid=125&m=0>

6 <http://dindigul.nic.in/forest.htm>

7 ibid

—Postcard from Trinidad and Tobago—
Tropical field biology—a new course at the University
of Arkansas, Fort Smith

Ragupathy Kannan

Kannan, R. 2010. Postcard from Trinidad and Tobago: Tropical field biology—a new course at the University of Arkansas, Fort Smith.
Indian Birds 5 (5): 146–147.

What is the best way to introduce biology students to the wonders of birding in tropical America without overwhelming them with its diversity? Ideally, find an island very close to the mainland with key representative habitats and bird families, but with limited numbers of species. Ensure the logistics are conducive, avoid strenuous hikes and provide ready access to good food and drinks. Choose an English-speaking and politically stable country with knowledgeable local guides to make it easier and safer for American students.

Sounds like a tall order? Not really. Those conditions fit Trinidad and Tobago, a delightful little island nation just 10 kms from Venezuela. That's exactly why I chose this as the venue for my new Tropical Field Biology course. At 4,904 kms²—about the size of Goa—it has the most number of bird species *per unit area* for any country in the world (234 species per 2,600 km², compared with about one species for the same area in India). That means you don't have to travel a lot to find new birds—perfect for the novice.

Ten students and I were pampered for a week (May 2009) at the world famous Asa Wright Nature Center (AWNC), a set of rustic cabins around a British-era bungalow nestled in the lush Arima Valley of Trinidad. From its legendary verandahs, oft mentioned in birding websites, we were treated to a panoramic view of the verdant tropical forest-clad valley that slopes away into the horizon. Neotropical specials like toucans, tanagers, antbirds, oropendolas, bananaquits, honeycreepers, motmots, and euphonias abound in the valley. Many of them ventured within arm's reach of the visitors on the verandah, attracted by an abundance of bird food and baths. Indeed, if there is the perfect place to start your forays into the new world tropics, this is it.

For ease of birding, no place in my experience compares to AWNC. You relax in the comforts of the verandah (where food, libations and sofas abound) and make a huge dent in your species-to-see list. Or enjoy the antics of the dozen or so species of hummingbirds ranging from tiny coquettes with stunning colors and crests, to large jacobins and hermits that zoom in and out as blurs, constantly harrying each other with territorial zeal. In the afternoons when the frenzy of bird activity wanes, you interact with the apparently omniscient local guides who are always at hand. Or scan the skies above the valley for white hawks and swallow-tailed kites or any of the myriads of other raptor species that ride the thermals. And there is always an agouti (a large rodent) or a tiger lizard (a *Varanus*-like monitor) to break any monotony.

Each day, at the crack of dawn, AWNC staff load the bird feeders copiously with bread, fruit, and nectar. This regular feeding, coupled with the plethora of bird attracting flora in the

vicinity of the verandah means that the period between 0600 hrs and 0700 hrs can yield over 50 bird species spread over a gamut of bird families, all enjoyed over steaming cups of fresh-brewed locally grown and ground coffee.

One of the highlights of the week was the hike to a nearby riparian grotto to see the only nocturnal fruit eating bird in the world, the oilbird. These birds are also known for their echolocation abilities that enable them maneuver through dark caves where they roost and nest. Also, along one of the immaculately maintained trails that crisscross the property, we were treated to the extraordinary sight of two species of manakins displaying at their leks. So fixed are these leks that they are indicated by big, informative, and permanently rooted banner boards, and wooden fences keep visitors on the trails. The bearded bellbird (a cotinga) site too was similarly posted. And guides led us to see a broken stump on a dead tree, which upon close inspection morphed into a potoo, a nightjar-like master of camouflage and deception (“*I see the stump, Dr. Kannan, but where is the bird?!*”). One gets the feeling of being in a zoo, and we constantly had to remind ourselves that the birds are completely wild denizens of the area!

In our quest to cover as many habitats as possible, we spent one evening boating in the mangrove swamps near Port of Spain (the capital) and saw hundreds of scarlet ibises—the national emblem of Trinidad, proudly featured on their flag, currency notes, and coins. These gaudy birds derive their hues from a crustacean they consume in prodigious quantities. Many a zoo in the past has realized the hard way that the colours fade when they are not given that particular shrimp to eat. Apart from hordes of other mangrove and coastal specialties like bi-coloured conebills and black-crested antshrikes, we were also blessed with views of Cook's tree boas and silky anteaters, both coiled and asleep amongst mangrove branches while our boat glided below.

The *grand finale* was our night adventure on a remote forested beach where we witnessed the ancient ritual of leatherback sea turtles coming ashore to nest. We saw four massive females crawl out of the ocean, prepare their nests and lay up to 80 eggs each, bury them and then return to sea leaving tracks more than six feet wide in the sand. The sight of these half-ton creatures emerging from the water in the darkness was awesome. Students were able to walk up to them and make observations. Naturalists from Nature Seekers, a local NGO that has done commendable work on conserving these giants, served as guides. They stapled and tagged their flippers and injected electronic chips in the shoulder muscles to track them. Two of the females were returnees, having nested earlier that season (with their remarkable sperm storage ability, they could nest up to five times in one season, with each clutch sired by different males). Coincidentally, Nature Seekers'

work was featured in that month's (May 2009) *National Geographic*. The article was an invaluable teaching tool in one of our readings and discussions on the verandah.

Students returned to the USA after getting to know the major bird families of the Neotropics and an overall feel for tropical nature, without the sense of being flooded with too much

information. Above all, their curiosities have been piqued. Some of them are planning to return to Trinidad for post-graduate research. At least one of them appears to be hooked to bird photography and another is taking daring tentative steps towards taxonomic botany. The Tropical Field Biology course is off to a good start.

Recoveries from the *Newsletter for Birdwatchers (1970)—23*

Zafar Futehally

Futehally, Z. 2010. Recoveries from the *Newsletter for Birdwatchers (1970)—23*. *Indian Birds* 5 (5): 147–148.

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In my previous column I had said that 1970 was a year in which conservation and natural history activities gathered a new momentum mainly because of the meeting of the IUCN General Assembly, which took place in November 1969. The *Newsletter* too received a spate of good articles in that period. I have reproduced some from the January 1970 issue, and here is another by our diplomat/ornithologist, Sudhir Vyas, who has featured in this column before.

Incidentally I was asked to give a talk on conservation to the IAS probationers at the National Administrative Institute in Mussoorie at the time when Sudhir was in the institute. Later he offered to take me for a bird walk, which I declined because of an alternative offer from the equerry of the riding club to take me out for a canter. Horses and birds remain my passion in equal measure.

The birds of Mussoorie

Sudhir Vyas

"The first bird, which intrudes upon your peace in Mussoorie, is not the chirpy sparrow, not the garrulous crow, but that rough and ready champion of song, the Himalayan Whistling Thrush. It was everywhere in the woods, on the open hillsides, even in the bazaar. Its pleasant song was a regular feature of both day and night. But apart from this I saw very few thrushes. I saw the Blueheaded and Chestnutbellied Rock Thrushes occasionally. The Greywinged Blackbird was often heard singing, but being shy, was rarely seen. During the last week of our stay, however, a male took up quarters in our garden and delighted us with his song.

"An amusing incident took place one day, when I descended into the thorny undergrowth on hearing what sounded like a puppy. But no puppy was to be found. Instead, three Blue Magpies fluttered off from a bush. I gained a wise experience—always test for Blue Magpies before diving after unfamiliar noises—and paid for it by quite a few scratches. Redbilled Blue Magpies were, incidentally, very common. A party of nearly 20 frequented the municipal Gardens. On the contrary I never saw the Yellowbilled species.

"My exhilaration knew no bounds when I saw a Sirkeer Cuckoo at 6500 feet. It declined considerably however on reading in Whistler that they are often found up to '6000 ft and even

occasionally higher.' It was much less rufous in colour than the ones I saw at Poona. Indian, Common, and Himalayan cuckoos were often heard. I once heard the 'Brainfever' of a Hawk-cuckoo but I could not find it.

"A lovely place for birds is the Kamptee Road. Here I once saw a Himalayan Barred Owlet feeding its brood of three. I once heard the Himalayan Scops Owl's double whistle at night but I could not find it. On another occasion, I saw a nightjar fluttering along at dusk but it was silent and could not be identified. Kokla Green pigeons were common along the Kamptee Road and they often fed on berry bushes close to the ground, thus providing an unobstructed view of themselves. They looked beautiful with their orange breasts and maroon backs. Kaleej pheasants too were fairly common here.

"A great disappointment was the paucity of hawks in Mussoorie. The Kestrel was the commonest falcon and a pair had a nest on a high ledge on Gun Hill. A small falcon was seen twice in forest, and I think it was a Hobby. On another occasion I saw a large peregrine-like falcon, but it had pale underparts. What could an Eastern Peregrine be doing here in June? I saw a Shikra once but no eagles at all. There was a refuse dump in Mussoorie where large number of Scavenger Vultures, Large Indian Kites and a Lammergeier or two fed on rubbish. A number of Grey Drongos also frequented this place. Could it be due to the flies attracted to the rotting refuse?

"The Redwinged Shrike-babbler was much commoner than what I had expected. I once saw a family party on the 16th of June with two young. They often associated with Treepies, Drongos and Dark Grey Cuckoo-shrikes. I also saw once what I think was a female Maroon Oriole.

"A Hoopoe and a huge colony of House Swifts had nests in the remains of the 'Standard Skating Rink' on the Mall which burnt down in 1968 and by courtesy of the municipality is still standing. I hope it survives long enough for the swifts to raise their young. Blyth's Whiterumped Swifts arrived in some numbers about the middle of June. A little later Whitethroated Spinetails and Alpine Swifts also made their appearance. Shortbilled Minivets had finished breeding by June and could be seen in family parties.

"The Great Himalayan Barbet was common in the jungles as were the Scalybellied and Blacknaped Green woodpeckers

and the Brownfronted Pied Woodpecker. The Himalayan Pied Woodpecker was rare and an interesting discovery was the Lesser Yellownaped Woodpecker.

"I must admit however that there were quite a few disappointments too. From books I had formed the impression that hills would be teeming with Laughing thrushes. What a shock I received to see only two species—the Streaked and the Whitethroated. Even the latter was by no means common. A few rather pale Redrumped Swallows, which nested under bridges, and some seedy looking House-martins were the only swallows I saw. There was hardly a Tree-warbler in the area. I saw one—a plain brown and buff one with no wing bar and a pinkish beak, which refused to utter a sound and could not be identified. I left it in disgust. The Greyheaded Flycatcher-Warbler was, however overwhelmingly abundant. I saw only two Yellowbacked sunbirds and a few Firebreasted flowerpeckers and Black bulbuls. Neither did I see any Hill Partridges. The Black Partridge however was common and the hills resounded with their calls in the morning. Another relief was the predominance of the Cinnamon Sparrow over the House Sparrow. Crows (with very harsh voices) were also not common.

"In spite of this it was a very enjoyable outing and I saw over a hundred species of birds in one and half months. I was quite disappointed to return to the sweltering heat and humidity of

Lucknow." [Vyas, Sudhir. 1970. Birds of Mussoorie. *Newsletter for Birdwatchers* 10 (1): 4–6.]

The Brown Shrike *Lanius cristatus*

V G Kartha, an engineer in the Bhillai Steel Plant (Central India) kept a close watch on the arrival and departure of this migrant from Eastern Europe, allegedly one of the earliest of our winter visitors and the latest to depart. A very widespread species, reaching as far south as the Laccadives. I have watched this shrike for long periods both around Bombay and in Kihim, and what Kartha writes rings a bell. "It is usually so motionless that it is difficult to detect. The occasional movement it permits itself is of the head, which swivels this way and that, keeping a sharp look-out for "jay- walking" insects and worms ... It takes off so suddenly that you blink in your eye-pieces. It flies to the ground, makes a pin-point landing ... picks up the insect ... and flies back to the same or an adjacent outpost. When on the ground it holds its tail slightly elevated ... I have never heard it calling from anywhere close to the ground. It is usually from high up among the leaves or from overhead electric wires. It opens its mouth wide and its whole body and tail vibrates with the effort." [Kartha, V. G. 1970. The Brown Shrike in Bhillai. *Newsletter for Birdwatchers* 10 (1): 2–4.]

Large-tailed Nightjar *Caprimulgus macrurus* sightings in Kachchh, Gujarat, India

Veer Vaibhav Mishra & Ratan Singh

Mishra, V. V., & Singh, R., 2010. Large-tailed Nightjar *Caprimulgus macrurus* sightings in Kachchh, Gujarat, India. *Indian Birds* 5 (5): 148.

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On 25 December 2008, at 1130 hrs, we were watching birds with M. Coverdale in Phot Mahadev thorn forest of Kachchh (Gujarat, India). We were close to a ravine with *Euphorbia* sp., vegetation growing on the slopes, and a scanty growth of acacia trees. We flushed two nightjars (Family: Caprimulgidae), and upon searching found eight more, all roosting in the ravine.

The nightjars had large, long tails, black and gold scapular stripes, white throat patches, barred breasts, and pale bars on wing coverts (Rasmussen & Anderton 2005).

We identified them as Large-tailed Nightjar *Caprimulgus macrurus*. Nigel Cleere (see reference) confirmed the identification of the nightjar.

Large-tailed Nightjar is found in north-eastern Pakistan (Murree Hills), Himalaya, Uttaranchal, Nepal, eastward through the Assam Valley, Orissa, and north-eastern India. This species is known to winter in Madhya Pradesh. There is one record of this species from Gujarat (heard calling by Pranav Trivedi). The present record, where eight individuals of Large-tailed Nightjars were sighted, and photographed in Kachchh, is an important addition to the avifauna of Kachchh, and Gujarat.

References

- Cleere, N. & Nurney, D. 1998. *Nightjars: a guide to nightjars and related nightbirds*. Sussex: Pica Press.
- Rasmussen, P. C., & Anderton, J. C., 2005. *Birds of South Asia: the Ripley Guide*. 2 vols. Washington, D.C. and Barcelona: Smithsonian Institution & Lynx Edicions.
- Trivedi, P., & Soni, V. C., 2006. Significant bird records and local extinctions in Purna and Ratanmahal Wildlife Sanctuaries, Gujarat, India. *Forktail* 22: 39–48.



Large-tailed Nightjar *Caprimulgus macrurus*

Novel drinking behaviour of a Comb Duck *Sarkidiornis melanotis* in the National Chambal Sanctuary, Uttar Pradesh

K.S. Gopi Sundar

Sundar, K. S. Gopi. 2010. Novel drinking behaviour of a Comb Duck *Sarkidiornis melanotis* in the National Chambal Sanctuary, Uttar Pradesh. *Indian Birds* 5 (5): 149.

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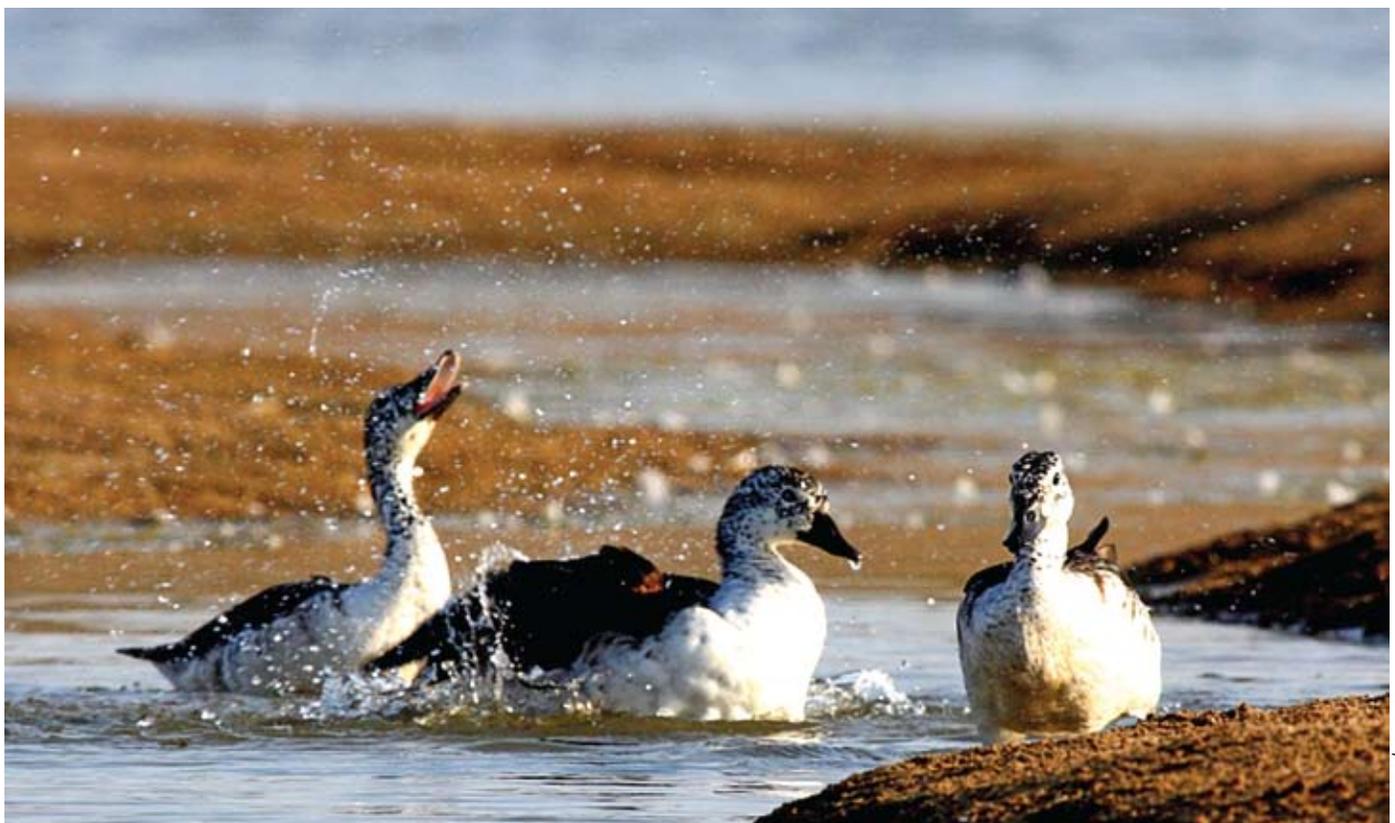
In the National Chambal Sanctuary, I observed several Comb Ducks *Sarkidiornis melanotis* bathing in the Chambal River on the evening of 9 April 2009. One of the ducks next to a bathing individual raised its neck and held its beak open obviously drinking the water splashed high (Fig. 1). Ducks usually drink by scooping up water in its lower mandible and raising the neck allowing the water to run down the neck; I could find no published reference to ducks drinking in this unusual way.

The majority of birds drink water by the scoop-and-tilt-head method. Specialized drinking methods include nectar-feeding using protrusible, grooved, or trough-like tongues (as in Nectariniidae), lapping water with tongues (as in Psittacidae), sucking using the whole beak as a straw (as in all Columbidae, Pteroclididae (Cade *et al.* 1966), rarely in Estrildinae and Sylviidae, and Mousebirds (Cade & Greenwald 1966)), and drinking dew drops from a leaf's surface (Black-chinned Hummingbird

Archilochus alexandri (Baltosser & Russell 2000)). Pelicans very rarely drink by holding their beaks open in the rain (<http://www.stanford.edu/group/stanfordbirds/text/essays/Drinking.html>).

References

- Baltosser, W. H., & Russell, S. M. 2000. Black-chinned Hummingbird (*Archilochus alexandri*), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: <http://bna.birds.cornell.edu/floyd.lib.umn.edu/bna/species/495>. doi:10.2173/bna.495
- Cade, T. J., & Greenwald, L. I. 1966. Drinking behavior of mousebirds in the Namib Desert, southern Africa. *The Auk* 83: 126–128.
- Cade, T. J., Willoughby, E. J., & Maclean, G. L. 1966. Drinking behavior of sandgrouse in the Namib and Kalahari Deserts, Africa. *The Auk* 83: 124–126.



K. S. Gopi Sundar

Fig. 1. One duck's bath water is another one's drink. Comb Ducks in the National Chambal Sanctuary display an unusual behaviour.

Possible sighting of an Oriental Honey-Buzzard *Pernis ptilorhyncus orientalis*

Samir Mehta

Mehta, S. 2010. Possible sighting of an Oriental Honey-Buzzard *Pernis ptilorhyncus orientalis*. *Indian Birds* 5 (5): 150.

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On 15 February 2009 a pair of raptors was seen soaring, and circling overhead at 1215 hrs, at Rangdhamali (26°52'N 88°73'E), 10 kms north of the town of Jalpaiguri, West Bengal. One bird was photographed, under favorable light conditions. The raptors were observed for 3–5 min before they disappeared over the horizon to the north.



Amit Thakurta

Oriental Honey-Buzzard *Pernis ptilorhyncus orientalis*?

The Oriental Honey-Buzzard is a common, and widely distributed raptor in the Indian Subcontinent. The resident race is *ruficollis*, and there have been a few records of the migratory subspecies *orientalis*, a vagrant, from different regions of India in the remote past (Rasmussen & Anderton 2005).

At first glance my attention was drawn to the length of the wings, which seemed longer than those of 'normal' Oriental Honey-Buzzards seen in India. Also clearly evident was the dark, distinct barring on the under-surface of the body, which is unusual for *ruficollis* (Naoroji 2006). On closer examination of the image, a heavy, broad black gorget was noticed. This is a classic

identification characteristic of *orientalis*. The outer primaries below show dark tips grading into paler bases, lacking much contrast. The underwing shows three dark wing-bars across secondaries evenly spaced between the trailing edge and the greater underwing-coverts which are characteristic of female Oriental Honey-Buzzard, as is the tail pattern showing three evenly spaced dark bands in the proximal half of the tail with a sub-terminal dark band framing a broad pale band proximally. From the photographs, the above observations, and the description of *orientalis* in Ferguson-Lees & Christie (2001), I feel that the bird in the photograph is *orientalis*.

Interestingly, while attempting to define the pattern of its few confirmed records it was noticed that the present sighting falls in the vicinity of a number of previous sightings from Mangphu (West Bengal), Charduar (Assam), and Patna (Bihar) (Rasmussen & Anderton 2005). The Jalpaiguri area is 7°–8°E off the regular migration route to Southeast Asia, and it seems that the most likely cause for the westward vagrancy could possibly be attributed to changes in wind direction, and speed, during the migration period, or the distribution, and abundance of wasps, and bees in the region.

Two systematic studies on raptor migration in the Himalayas (Den Besten 2004; De Roder 1989) did not report sighting *orientalis*.

The migratory route of this Siberian breeder is poorly understood, and documented, unlike that of the migratory *apivorus*, which has been studied by satellite tracking (Higuchi 2005). The only certain diagnostic criteria is measurement of the wingspan of a trapped bird, which makes its field identification challenging.

Acknowledgements

I wish to thank Dr Chaiyan for his pertinent inputs.

References

- De Roder F. E., 1989. The migration of raptors south of Annapurna, Nepal, autumn 1985. *Forktail* 4: 9–17.
- Ferguson-Lees, J., & Christie, D.A., 2001. *Raptors of the world*. Christopher Helm, London.
- Den Besten, J. W., 2004. Migration of Steppe Eagles *Aquila nipalensis* and other raptors along the Himalayas past Dharamsala, India, in autumn 2001 and spring 2002. *Forktail* 20: 9–13.
- Higuchi, H., et al. 2005. Migrations of Honey-buzzards *Pernis apivorus* based on satellite tracking. *Ornithological Science* 4 (2): 109–115.
- Naoroji, R., 2007. *Birds of prey of the Indian Subcontinent*. New Delhi: Om Books International.
- Rasmussen, P.C & Anderton, J.C., 2005. *Birds of South Asia: the Ripley guide*. Vol. 2. Washington DC & Barcelona: Smithsonian Institution & Lynx Edicions.

Nesting of Sykes's Nightjar *Caprimulgus mahrattensis* in the Great Rann of Kachchh, Gujarat, India

J. K. Tiwari & Mohammed Dadu

Tiwari, J. K., & Dadu, M., 2010. Nesting of Sykes's Nightjar *Caprimulgus mahrattensis* in the Great Rann of Kachchh, Gujarat, India. *Indian Birds* 5 (5): 151–152.

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Sykes's Nightjar *Caprimulgus mahrattensis* is known to be 'Resident, with some migratory movements. Breeds in Pakistan and Kutch; possibly breeds in Punjab, Saurashtra and Rajasthan, India; winters south to S Karnataka and east to C Uttar Pradesh,' (Grimmett *et al.* 1998). Rasmussen & Anderton (2005) however, record it as 'wintering widely in W India, occasionally reaching environs of Delhi, N Madhya [Pradesh], and Bombay.'

This note presents photographic documentation of the first confirmed nesting record of the Sykes's Nightjar in Gujarat.

Sykes's Nightjar is seen commonly from November to February, along the coastal sand dunes of Kachchh, and in the

Banni grasslands, on the edge of the Great Rann in Gujarat. Birds are seen roosting in the clutter of decaying *Prosopis juliflora* where they are perfectly camouflaged in their surroundings. Sangha (*pers. comm.*) has also seen it in open areas with barely any vegetation; on the periphery of the Little Rann. Sightings begin to drop, in Banni grasslands, and other parts of Kachchh from the end of February onwards. I have never heard the Sykes's Nightjar calling, in all my 15 years of field work in Kachchh.

Nesting

Sir Geoffery Archer collected a fledgling male Sykes's Nightjar on 26 July 1939, from Charwa forest, near Bhuj, Kachchh, making it 'the southernmost breeding record, the nearest being in Sind,' (Abdulali & Hussain 1968). Grimmett *et al.* (1998) might have extrapolated from Sir Geoffery's specimen about its breeding in Rajasthan, but there are no published breeding records from that state/region. However, Per Undeland, and Harkirat Sangha observed an active nest of the Sykes's Nightjar on 8 May 1998, on the sandy dry bed of the Sutlej River about 3 kms downstream of Harike barrage, Punjab (Sangha, *pers. comm.*).

On 3 March 2009, at 1600 hrs, the active nest of a Sykes's Nightjar *Caprimulgus mahrattensis* (Figs. 1 & 2) was spotted on the edge of the Great Rann of Kachchh, in Kachchh district (Gujarat, India). The nest was on open, bare ground, with two cryptic eggs lying on the baked mud of Banni (Fig. 3).

Another nest was found on 4 May 2009, near Bhagadia village in Banni grasslands—with two chicks.



Figs. 1 & 2. Sykes's Nightjar *Caprimulgus mahrattensis* on nest in Banni grasslands, 4 May 2009.

Fig. 3. Cryptic eggs of Sykes's Nightjar *Caprimulgus mahrattensis* in Banni grasslands.



Sykes's Nightjar *Caprimulgus mahrattensis* chicks in nest in Banni grasslands, 4 May 2009.

Various ornithologists have found eggs of Sykes's Nightjar in March–April in Sind (Pakistan), in habitat similar to that in the Great Rann of Kachchh (Roberts 1991).

Since the breeding of Sykes's Nightjar is semi-colonial (Roberts 1991), birdwatchers in north-western India should be alert during March–May for sight records, calls, display flights, and hopefully, more nesting records.

References

- Abdulali, H. & Hussain, S. A. 1971. Extension of the breeding range of Sykes's Nightjar (*Caprimulgus mahrattensis* Sykes) in Indian limits. *J. Bombay Nat. Hist. Soc.* 68 (2): 452.
- Grimmett, R., Inskipp, C., & Inskipp, T., 1998. *Birds of the Indian Subcontinent*. 1st ed. London: Christopher Helm, A & C Black.
- Rasmussen, P. C., & Anderton, J. C., 2005. *Birds of South Asia: the Ripley guide: attributes and status*. Vol. 2. 1st ed. Washington, D.C. and Barcelona: Smithsonian Institution and Lynx Edicions.
- Roberts, T. J., 1991. *The Birds of Pakistan: regional studies and non-passeriformes*. Vol. 1. 1st ed. Karachi: Oxford University Press.

A study on the habits of Oriental Magpie-Robin *Copsychus saularis*

R. Sreekar

Sreekar, R. 2010. A study on the habits of Oriental Magpie-Robin *Copsychus saularis*. *Indian Birds* 5 (5): 152–153.

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Introduction

Oriental Magpie-Robin *Copsychus saularis* is one of the most familiar birds in southern India, and yet there is very little mentioned about its habits in literature (Bonnell 1934). Robins mostly feed on invertebrates and there are records of them feeding

on geckos (Sumithran 1982; Saxena 1998). Here I present results of a study conducted in the months of June–July 2008 on habitat use, food habits, and song of Oriental Magpie-Robins in the property of the Madras Crocodile Bank Trust / Centre for Herpetology, Mammalapuram, Tamil Nadu, India.



Fig 1. Map showing the territory of a Magpie Robin pair in Madras Crocodile Bank. Rectangle enclosed in a black Line=territory; Red dot=nesting site; Yellow dots=common feeding sites; Blue dot=common singing site. [Source of map: Google Earth.]

Study area

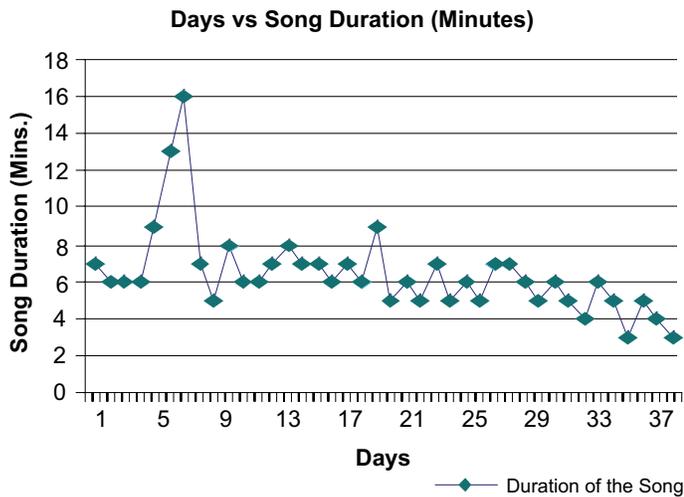
Madras Crocodile Bank Trust (12°44'35"N 80°14'23"E; MCBT) forms an expanse of about 3.4 ha of semi-wilderness along the coast of the Bay of Bengal in the state of Tamil Nadu (southern India). The characteristic feature of MCBT is its overlap between the habitat, which is woodland and wetland. 62 species of birds are recorded from MCBT, and it is also home to 23 species of birds, which reside, and breed within the park limits. Little Cormorant *Phalacrocorax niger*, Little Egret *Egretta garzetta*, Median Egret *Mesophoyx intermedia*, and Black-Crowned Night Heron *Nycticorax nycticorax* breed in large numbers on the trees in MCBT.

Methods

The robin study in MCBT was carried out regularly, on a daily basis, during the study period. Spot-mapping technique (Ralph *et al.* 1993) was employed to study the birds. All observations were made using a pair of 10x50 binoculars. Graphs were generated using MS Excel software.

Home range

Home range is calculated by circling the sightings of the birds around the distance, and the area is calculated by drawing



a convex polygon. Mean home range of the birds during the breeding season was c. 1.3 ha.

The nest site was 2.5 m above the ground, in a tree hole very close to the kitchen, and the guesthouses. The common singing site was c. 50 m from the nest site, on a bamboo shoot, where the male sang for an average of six minutes everyday, between 1730–1815 hrs, with the female murmuring below.

Breeding behavior

Copulation was seen before and after the song. The time period of the song is high during copulating period, and was observed to go down after the chicks are hatched.

Food habits

The nesting pair was seen preying on dragonflies in flight, mostly the common picture-wing *Rhyothemis variegata*, praying mantis larvae in the leaf litter, and other invertebrates. They were also seen preying on house geckos *Hemidactylus* species. Geckos like *H. brookii*, and *H. leschenaultii* formed an easy target for the robins, when on the floor. All sightings of geckos getting picked up were in the kitchen's corridor.

Discussion

The duration of the song could have reduced in consideration of hatchling security and food. The duration of the song may advertise the quality of the male for the female. More studies should be done to understand their behavior.

Acknowledgements

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References

- Bonnell, B. 1934. Notes on the habits of the Magpie Robin *Copsychus saularis saularis* Linn. *J. Bombay Nat. Hist. Soc.* 37 (3): 729–730.
- Ralph, C. J., Geupel, G. R., Pyle, P., Martin, T. E. & DeSante, D. F. 1993. *Handbook of field methods for monitoring landbirds*. California: Pacific Southwest Research Station, Albany.
- Saxena, R. 1998. Geckos as food of Magpie Robin. *J. Bombay Nat. Hist. Soc.* 95 (2): 347.
- Sumithran, S. 1982. Magpie-Robin feeding on geckos. *J. Bombay Nat. Hist. Soc.* 79 (3): 671.

Range extension of Bank Myna *Acridotheres ginginianus* in southern India with new records from Andhra Pradesh

Humayun Taher, R. Sreekar¹, Sivaji Anguru & Siraj A. Taher

Taher, H., Sreekar, R., Anguru, S. & Taher, S. A. 2010. Range extension of Bank Myna *Acridotheres ginginianus* in southern India with new records from Andhra Pradesh. *Indian Birds* 5 (5): 153–154.

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The Bank Myna's *Acridotheres ginginianus* range is considered to be limited to the plains of northern India between the outer Himalayas in the north, and the Vindhya Range in the south, and from the North-west Frontier Province and the Sind region to Bengal (Oates 1889; Baker 1926; Marien 1950; Ali & Ripley 1983). The records from Nashik (Ball 1878; Bhaskar 1981), Mumbai (Abdulali & Ali 1953; Ambedkar 1976), Pune (Gole 1984), Goa (Lainer 1999), and Dharwad (Vijay Mohan Raj, verbally, 25th March 2009) are considered to be the southern-most in south-western India and the records from Visakhapatnam (Sankar 1976; Taher & Pittie 1989), Srikakulam (S. M. Maqsood Javed, verbally, 20th March 2009), and Chennai (Raj 1914; Prasanna Sriya, verbally, 25th March 2009) are considered to be the southern-most in south-eastern India. Gole (1984) suggested that the records from Pune were, at that time, the southern-most record of the species. Most

of the authors of the southern records believe that the populations of these birds have spawned from escaped cage birds.

The species was considered to be extremely partial to well-watered terrain in the early 1950's (Marien 1950) but the Bank Mynas have adapted to the new 'urban' niche in the early 1980's and were seen piggy-backing confidently on the roof, the front bonnet or the rear-end of the food carriers of vehicles—this is considered as a new adaptation of its cattle riding habit (Ripley 1983).

On 15 January 2006, the second author (RS) sighted these birds on the way to Borra caves (18°16'52"N 83°02'30"E; 700 m a.s.l.) in the Ananthagari Hills of Vishakapatnam district, Andhra Pradesh state. They were foraging by the roadside.

On 25 January 2009, we had gone birdwatching to Gudivadalanka in Kolleru Wildlife Sanctuary (16°39'00"N 81°13'00"E), Andhra



District-wise spread of Bank Myna *Acridotheres ginginianus* in southern India (Source: Wikimedia)

Grey – Bank Myna distribution in southern India
 Red – Unconfirmed record; Black - State borders

Pradesh. This trip was primarily for the Asian Waterfowl Census in Kolleru. As we drove towards Gudivadilanka, the left side of the road was marshy with water level less than 0.3 m and on the right side there was an *Eichhornia* bed in deeper water. On the right, we noticed a few domestic buffaloes swimming towards us with Bank Mynas comfortably riding on their backs. The birds flushed on to an electric pole even as we took pictures. Fourteen were counted and were distinguished from the Common Myna *A. tristis* by their darker colouration, smaller size, orange bill and orbital skin and a crest-like tuft of feathers on the forehead. The first author (HT) recollects sighting this species in company with Jungle Myna *A. fuscus*, and Asian Pied Starling *Sturnus contra* at Kolleti Kota in the sanctuary on 25 January 2008.

On 15 March 2009, RS spotted c. 20 Bank Mynas in Lammasingi (17°48'52"N 83°29'00"E; 900 m a.s.l.) in East Godavari district, Andhra Pradesh. These birds were sighted along with Jungle Myna, and Asian Pied Starling close to a large open well, which is a source of water for the village.

There is also an unconfirmed report from the Sanjeevaiah Park, Hyderabad, 25 December 2007 (Ashwin Naidu, verbally, 25

December 2007 & 28 January 2009). These records show that the Bank Myna is gradually spreading into southern India (see map) and birdwatchers would do well to keep an eye out for them in the future.

Acknowledgements

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References

Abdulali, H. & Ali, S. 1953. The Pied Myna and the Bank Myna as birds of Bombay and Salsette. *J. Bombay Nat. Hist. Soc.* 51 (3): 736–737.
 Ali, S. & Ripley, S. D. 1983. *Handbook of the birds of India and Pakistan together with those of Bangladesh, Nepal, Bhutan and Sri Lanka*. Compact ed. Delhi: Oxford University Press.
 Ambedkar, V. C. 1976. The Bank Myna *Acridotheres ginginianus* in Bombay. *J. Bombay Nat. Hist. Soc.* 73 (1): 217.
 Baker, E. C. S. 1926. *The fauna of British India, including Ceylon and Burma. Birds*. Vol III. 2nd ed. Shiple, A. E. (ed.) London: Taylor and Francis.
 Ball, V. 1878. From the Ganges to the Godaveri. On the distribution of birds, so far as it is at present known, throughout the hilly region which extends from the Rajmehal Hills to the Godaveri Valley. *Stray Feathers* VII (3,4&5): 191–235.
 Bhaskar, V. 1981. Birds of Nizambad and Nasik. *Mayura* 2 (3): 6.
 Gole, Prakash. 1984. Birds of the Pune region. *Newsletter for Birdwatchers* 24 (1&2): 7–9.
 Lainer, H. 1999. The birds of Goa (Part II). *J. Bombay Nat. Hist. Soc.* 96 (3): 405–423.
 Marien, D. 1950. Notes on some Asiatic Sturnidae (Birds). *J. Bombay Nat. Hist. Soc.* 49 (3): 471–487.
 Oates, E. W. 1889. *The fauna of British India, including Ceylon and Burma (Birds)*. Vol I. 1st ed. Blandford, W. T. (ed.) London: Taylor and Francis.
 Raj, B. S. 1914. The occurrence of the Bank Myna *Acridotheres ginginianus* near Madras. *J. Bombay Nat. Hist. Soc.* 23 (1): 155.
 Ripley, S. D. 1983. Habits of the Bank Myna *A. ginginianus*. *J. Bombay Nat. Hist. Soc.* 80 (1): 219.
 Sankar, K. J. N. G. 1976. Occurrence of Bank Myna *Acridotheres ginginianus* (Latham) in Visakhapatnam (A.P.). *J. Bombay nat. hist. Soc.* 72 (3): 857–858.
 Taher, S. A. & Pittie, A. 1989. *A checklist of birds of Andhra Pradesh*. Hyderabad, India: Published by the authors.

— *In memoriam* —

Syed Ahmed Hussain 1944–2010

— *In memoriam* —

Siraj Ahmed Taher 1942–2010

An injured Oriental Bay Owl *Phodilus badius* in Goa, India

Jennifer De Souza & Qupeleio De Souza

De Souza, J. & De Souza, Q. 2010. An injured Oriental Bay Owl *Phodilus badius* in Goa, India. *Indian Birds* 5 (5): 155.

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The Oriental Bay Owl is a resident of semi-evergreen, and evergreen forests. Its strictly nocturnal habits, low density of populations, and secretive nature contribute to its status as one of India's more little known owls (Ali & Ripley 1987). Within India it occurs in two widely separated geographic regions, apparently rare in both although, perhaps, as this report might indicate, to some extent overlooked.

The northern race *Phodilus badius saturatus* is known to extend throughout the Himalayan foothills from Sikkim to south-eastern Arunachal Pradesh, and the southern Assam Hills. Two disjunct populations, *P. b. ripleyi* and *P. b. assimilis*, occur in the southern Western Ghats of Kerala/Tamil Nadu, and in the wet and intermediate zones of Sri Lanka, respectively (Inglis 1945; Ali & Ripley 1987; Rasmussen & Anderton 2005). These two southern races are sometimes considered a distinct species, Ceylon Bay Owl *P. assimilis*, on the basis of morphological, and in particular, vocal variations (Rasmussen & Anderton 2005).

Until the early 1990s *P. b. ripleyi* was known only from a single specimen taken at Periasolai (10° 36'N 74°40'E) in Kerala's Nelliampathy Hills (Hussain & Khan 1978), following which almost all recorded sightings have been from the Anaimalai Hills (Kannan 1993, 1998; Sugathan & Jacob 1995; Muddappa 1998; Raman 2001). It has therefore long been considered that the distributional range of this species in peninsular India is across a very small section of the southern Western Ghats, although there have been previous extralimital reports from Bandipur National Park (Ahmed & Yekanthappa 1998), and Sirsi (Vasudeva *et al.* 2005), both in Karnataka state.

Here we present, what is almost certainly, the first record of Oriental Bay Owl in Goa, and the northern-most record within the Western Ghats.

At around 0730 hrs on 8 April 2009 an owl was observed roosting on a low branch in Backwoods Camp (15°26'N 74°14'E; 95 m a.s.l.), within the Bhagwan Mahaveer Wildlife Sanctuary (Goa). The bird was immediately identified as an Oriental Bay Owl, this being a distinctive species, and one that we are familiar with. Excellent views were obtained at close range allowing us to view the bird from all aspects, noting the speckled chestnut and golden back, heavily banded wings, and short tail, pale facial disc with dark vertical eye stripes, and clearly defined chestnut cap.

The bird was clearly unsettled, changing its perch occasionally but never moving far. Disregarding its entirely unexpected appearance here, this uncharacteristic activity during daylight hours, in such close proximity to human habitation, was a cause for concern. It soon became clear that the bird was suffering a facial injury, periodically shaking its head to deter flies,

and scratching at the affected area with its foot. At about 0830 hrs the bird flew down onto the ground, clearly weakened, and the decision was taken to capture it to ascertain the extent of its injuries. Once in the hand, closer inspection showed a deep circular wound, approximately 1 cm in diameter, adjacent to the bill, infested with maggots, perhaps initially inflicted as a scratch or bite from a prey item. The bird was taken directly to the Goa clinic of International Animal Rescue for treatment, where sadly it succumbed to its injuries during the night. The specimen is to be donated to the collections of the Bombay Natural History Society following taxidermy.

The core areas of the Bhagwan Mahaveer Wildlife Sanctuary contain pristine, largely unexplored vegetation classified into three main forest types, namely, west coast tropical evergreen, west coast semi-evergreen, and moist deciduous. That an Oriental Bay Owl was found in appropriate habitat as far north as Goa raises questions about its status, and wider distribution within the Western Ghats. This region forms part of over 2,200 km² of protected forests in Goa, and neighbouring Karnataka and Maharashtra which, given the pervasion of suitable habitat, may be hosting previously overlooked populations of Oriental Bay Owl, extending its range considerably further north, than has been earlier supposed.

Acknowledgements

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References

- Ahmed, A. & Yekanthappa, K. 1998. *Birds of Bandipur National Park*. Mysore: Published by the Field Director, Project Tiger.
- Ali, S. & Ripley, S.D. 1987. *Compact handbook of birds of India and Pakistan together with those of Bangladesh, Nepal, Bhutan, and Sri Lanka*. 2nd ed. Bombay: Oxford University Press.
- Hussain, S. A. & Khan, M. A. R. 1978. A new subspecies of Bay Owl [*Phodilus badius* (Horsfield)] from peninsular India. *J. Bombay Nat. Hist. Soc.* 74 (2): 334–336.
- Inglis, C.M. 1945. The Northern Bay Owl. *J. Bengal Nat. Hist. Soc.* 19: 93–96.
- Kannan, R. 1993. Rediscovery of the Oriental Bay-Owl *Phodilus badius* in peninsular India. *Forktail* 8: 148–149.
- Kannan, R. 1998. Avifauna of the Anaimalai Hills (Western Ghats) of southern India. *J. Bombay Nat. Hist. Soc.* 95 (2): 193–214.
- Muddappa, D.C. 1998. Sight record of the Oriental Bay Owl (*Phodilus badius ripleyi*) in the Annamalai Hills, southern Western Ghats, India. *J. Bombay Nat. Hist. Soc.* 95: 343.
- Raman, T. R. S. 2001. Observations on the Oriental Bay Owl *Phodilus badius* and range extension in the Western Ghats, India. *Forktail* 17: 110–111.
- Rasmussen, P. C. & Anderton, J. C. 2005. *Birds of South Asia: the Ripley guide*. 2 vols. Washington DC & Barcelona: Smithsonian Institution & Lynx Edicions.
- Sugathan, R. & Jacob, K. C. 1995. Further records of the Bay Owl from Kerala. *Newsletter for Birdwatchers* 35 (4): 77–78.
- Vasudeva, R., Hareesh, T.S., Hombe Gowda, H.C., Bhat, S.D., Gunaga, R. & Mohan Raj, V. 2005. Report of an injured Ceylon Bay Owl *Phodilus assimilis* from Karnataka, India. *Indian Birds* 1 (5): 118–119.

David Napier



The injured Oriental Bay Owl *Phodilus badius*.

Partial albinism in Indian Chat *Cercomela fusca*

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Singh, P. 2010. Partial albinism in Indian Chat *Cercomela fusca*. *Indian Birds* 5 (5): 156.

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The Indian Chat *Cercomela fusca* is endemic to the Indian Subcontinent and is widely distributed all over central India. It is a ground feeding bird and is distributed north of the Narmada River, from Punjab in Pakistan on the west, through the Indian regions of Punjab, Uttar Pradesh, Bihar, and West Bengal; and in the western Himalayan foothills up to an altitude of 1,300m (Wikipedia 2008). The species is slightly larger than a House Sparrow *Passer domesticus* and has brown body colouration with dark brown wings and a blackish tail. It is a sedentary species but shows some local movement (Ali & Ripley 1989). According to Grimmett *et al.* (1998), the species is scarce and very local in northern Pakistan, but Roberts (1992) states that it occurs on the western boundary of Pakistan because this region comprises a flat alluvial plain. *Cercomela fusca* is a peri-commensal in the Thar region, and does not fear human habitation. It prefers rocks, cliffs, large old buildings, and ruined deserted structures (White 1919), and forts and buildings under construction (Singh 2007). The bird builds a unique "cup shaped" nest with pebbles lying on its periphery.

Albinism among birds is not rare and many albino and partially albino species have been reported in literature (Blatter 1906; Baker 1922; Macnamara 1940; Donahue 1963; Ghosal & Ghose 1990; Mahabal & Pande 2006; Pawashe *et al.* 2006; Mehra *et al.* 2009). However, this is the first report of albinism in Indian Chat.

A young partially albino Indian Chat was sighted in the desert town of Bikaner (Rajasthan), with a light yellowish body colour (Fig. 1). In a normal adult Indian Chat, the upper plumage is brown and lower plumage is rufous brown. The wings are darker brown and tail is almost black (Fig. 2). As this albino Indian Chat grew, the 'normal' brown colour appeared on its head, ventral, and anterior dorsal parts. However, its flight feathers and tail remained white and small white patches persisted on its head and other body parts (Fig. 3).

Albino animals have many disadvantages in the wild. They are easier to locate and thus become easy prey. If a predator is albino, it will be easily located by its prey species and might suffer from malnutrition and succumb to starvation. They look abnormal and could be rejected by other individuals of same species. The partial albino Indian Chat that we observed had a very short life span. Its conspecifics and even its parents rejected this abnormal looking bird. The parents chased it away by flying aggressively after it. This lonely bird survived for a few days and may have fallen prey to some predator, as it could not be sighted in the area in spite of concerted efforts to locate it.

References

- Ali, S. & Ripley, S.D. 1989. *Compact Handbook of the Birds of India and Pakistan*. Oxford University Press, Delhi, 1-737.
- Baker, H. R. 1922. Occurrence on the Nilgiris of a partial albino of the Southern Indian Scimitar Babbler *Pomatorhinus horsfieldi travancoriensis* (Harrington), F.B.I. No. 120. *J. Bombay Nat. Hist. Soc.* 28 (4): 1135.
- Blatter, E. 1906. A brown and white Crow. *J. Bombay Nat. Hist. Soc.* XVII (2): 519.
- Donahue, J. P. 1963. A partial albino Hoopoe (*Upupa epops*). *J. Bengal Nat.*

Hist. Soc. 31 (1): 34-36.

- Ghosal, D. K. & Ghose, R. K. 1990. Partial albinism in a specimen of the Crow-Pheasant *Centropus sinensis sinensis* (Stephens). *Records of the Zoological Survey of India* 87: 337.
- Grimmett, R., Inskipp, C. & Inskipp, T. 1998. *Birds of the Indian Subcontinent*. Oxford University Press, Delhi, 1-888.
- Macnamara, R. C. 1940. Partial albinism in a Chukor (*Alectoris graeca*). *J. Bombay Nat. Hist. Soc.* XLI (4): 899-900.
- Mahabal, A. & Pande, S. 2006. Occurrence of a partial albino Blue-rock Pigeon (*Columba livia*) on Burnt Island from 1938 to 2006 - a probable case of inheritance. *Newsletter for Birdwatchers* 46 (5): 70-72.
- Mehra, S. P., Singh, N. & Mehra, S. 2009. Sighting of a partially albino Red-wattled Lapwing *Vanellus indicus* in Udaipur, Rajasthan. *Indian Birds* 4 (3): 120.
- Pawashe, A., Pande, S. & Mahabal, A. 2006. Occurrence of isabelline cum partial albino Ashy-crowned Sparrow-Lark (*Eremopterix griseus Scopoli*) near Pune, India. *Newsletter for Birdwatchers* 46 (5): 72-73.
- Roberts, T.J. 1992. *Birds of Pakistan* (Vol. 2). Oxford University Press, Karachi, 1-617.
- Singh, P. 2007. Ecological and Ethological studies on Brown Rock-chat *Cercomela fusca* In Bikaner region of the Thar desert. Final Report submitted to UGC.
- White, L. S. 1919. Nesting habits of the Brown Rock-chat (*Cercomela fusca*). *J. Bombay Nat. Hist. Soc.*, 26: 44-45.



Fig. 1. Partially albino Indian Chat *Cercomela fusca* when young.



Fig. 2. Normal Indian Chat *Cercomela fusca* with dark brown wings and black tail.



Fig. 3. Partially albino Indian Chat *Cercomela fusca* with white tail and feathers.

New site record of Yellow-throated Bulbul *Pycnonotus xantholaemus* from Andhra Pradesh

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Sreekar, R. & Srinivasulu, C. 2010. New site record of Yellow-throated Bulbul *Pycnonotus xantholaemus* from Andhra Pradesh. *Indian Birds* 5 (5): 157.
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The Yellow-throated Bulbul *Pycnonotus xantholaemus* is endemic to peninsular India and is known to occur in Andhra Pradesh (Allen 1908; Subramanya & Prasad 1996; Kumar 1999; Srinivasulu 2003), Karnataka (Ali 1942; Subramanya *et al.* 1991; Karthikeyan *et al.* 1995; Thejaswi 2004; Misra *et al.* 2007), and Tamil Nadu (Nichols 1944; Rao 1995; Karthikeyan 1995; Beisenherz 2004; Thejaswi 2004; Narayan *et al.* 2006), with a few records from Kerala (Kannan 1993; Beisenherz 2004; Thejaswi 2004; Praveen & Namassivayan 2006).

The Yellow-throated Bulbul is considered to be one of the 78 threatened bird species in India (Anonymous 2008). In this note we place on record the sighting of a small population of these birds in Kolluru locality of Papikonda Hills in the northern Eastern Ghats, Khammam District, Andhra Pradesh.

The Papikonda Hills are an unbroken chain of rugged hills and plateaus that spread over an area of about 700+ km² (Javed *et al.* 2007). They possess a typical southern tropical dry deciduous and southern tropical moist deciduous forest types intermingled with scrub (Champion & Seth 1968). The annual rainfall ranges from 900–1,500 mm.

The birds were sighted at an altitude of 600 m while guiding the trekkers onto a hilly slope by making a dry streambed as pathway. The hillock is on the River Pammeleru, a tributary of the River Godavari. Three birds were sighted very close to the canopy along with Red-vented Bulbuls *P. cafer*. A bird was sighted sunning at 1030 hrs on 26.xii.2008, the bird looked very similar to the White-browed Bulbul *P. luteolus* but was differentiated by the distinct yellow on the throat and cheek region, lacking a white eyebrow, light yellow streaking on the underside and yellow barring on the secondaries. The bird had a yellowish-white vent and under-tail coverts.

Subramanya's (2004) prediction of the bird's occurrence in Orissa could well be prophetic as there is a continuous chain of forests from the Papikonda Hills to Chhattisgarh and Orissa.

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References

Ali, Salim 1942. The birds of Mysore. With notes by Hugh Whistler, Part II. *J. Bombay Nat. Hist. Soc.* 43 (3): 318–341.
Allen, P. R. 1908. Notes on the Yellow-throated Bulbul *Pycnonotus xantholaemus*. *J. Bombay Nat. Hist. Soc.* 18 (4): 905–907.
Anonymous 2008. 78 threatened bird species in India. *Buceros*, 13 (1):

3–4.
Beisenherz, W. 2004. Rediscovery of the Yellow-throated Bulbul *Pycnonotus xantholaemus* in the Anaimalai Hills, Western Ghats, South India. *J. Bombay Nat. Hist. Soc.* 101 (1): 160
Champion, H.G. & Seth, S. K. 1968. *A revised survey of the forestry types of India*. Government of India press, New Delhi, 404 pp.
Javed, S.M.M., Waran, Archana & Tampal, Farida 2007. On the occurrence of Golden Gecko *Calodactylodes aureus* (Beddome, 1870) in Papikonda Hills, Eastern Ghats, Andhra Pradesh, India. *Zoos' Print Journal* 22 (6): 2727–2729.
Kannan, R. 1993. Yellow-throated Bulbul in Anaimalais. *Newsletter for Birdwatchers* 32 (7–8): 19.
Karthikeyan, S., Prasad, J.N. & Srinivasa, T.S. 1995. Yellowthroated Bulbul *Pycnonotus xantholaemus* (Jerdon) at Biligirirangan Hills, Karnataka. *J. Bombay Nat. Hist. Soc.*, 92 (1): 123–124.
Karthikeyan, S. 1995. Notes on the occurrence of the Yellowthroated Bulbul *Pycnonotus xantholaemus* (Jerdon) at Shevaroy, Tamil Nadu. *J. Bombay Nat. Hist. Soc.* 92 (2): 266–267.
Kumar, S. A. 1999. Birding in Mananur forest range. *Newsletter for birdwatchers* 39 (1): 12
Misra, D., Shivaprakash, A. & Sadananda, K.B. 2007. Birds of Chamundi Hills Reserve Forest, Mysore, Karnataka. *Indian Birds* 3 (3): 82–86
Narayanan, S. P., Boopal, A., Nanjan, S., Kurian, J., Dhanya, R., Gomahty, N., Dastidar, D. G., Rajamamannan, M. A., Venkitachalam, R., Mukherjee, D., & Eswaran, R. 2006. New site record of the Yellow-throated Bulbul *Pycnonotus xantholaemus* from the Western Ghats of Tamil Nadu (India). *Indian Birds* 2 (6): 153–155.
Nichols, E. G. 1944. Occurrence of birds in Madura District. *J. Bombay Nat. Hist. Soc.*, 44 (3): 387–407.
Praveen, J. & Namassivayan, L. 2006. Sighting of Yellow-throated Bulbul *Pycnonotus xantholaemus* from Chinnar Wildlife Sanctuary, Kerala, Southern India. *Zoos' Print J.* 21 (4): 2228
Rao, T.K. 1995. Yellowthroated Bulbul - *Pycnonotus xantholaemus* (Jerdon) in Gingee. *Blackbuck*. 11 (1): 9–11.
Srinivasulu, C. 2003. Site records of yellow-throated bulbul *Pycnonotus xantholaemus* (Jerdon, 1844) in the Nallamala Hills, Eastern Ghats, Andhra Pradesh, India. *Zoos' Print J.* 18 (3): 1051–1052
Subramanya, S., Karthikeyan, S. & Prasad, J. N. 1991. Yellowthroated Bulbul at Nandi Hill. *Newsletter for Birdwatchers* 31 (3&4): 7–8.
Subramanya, S. & Prasad, J. N. 1996. Yellow-throated Bulbul's at Horseley hills. *J. Bombay Nat. Hist. Soc.* 93 (1): 55–58.
Subramanya, S. 2004. Does the Yellow-throated Bulbul *Pycnonotus xantholaemus* occur in Orissa? *Newsl. for Ornithologists* 1 (3): 39–40.
Thejaswi, S. 2004. New sites for the globally threatened Yellowthroated Bulbul *Pycnonotus xantholaemus* (Jerdon) in Karnataka, Kerala and Tamil Nadu, southern India. *J. Bombay Nat. Hist. Soc.*, 101 (3): 458–461.

First sighting record of Hooded Pitta *Pitta sordida* from Kaziranga National Park, India

Udayan Borthakur & Chatrapati Das

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The Hooded Pitta *Pitta sordida* is found from south-western China to Philippines, and New Guinea. In India, the race *cucullata* is a summer visitor to the Himalayan foothills of Himachal to Arunachal, and north-eastern Bangladesh, and perhaps also to Meghalaya, and Nagaland. The darker *abbotti*

species for Kaziranga, 'in view of records from different parts of the Brahmanputra valley.' This is the first report of Hooded Pitta from KNP.

On 2 July 2008, we were on a field trip to the Central Range (Kohora) of KNP, as part of Aaranyak's camera-trapping team for monitoring tiger populations.

While proceeding towards Hualpath Forest Camp, between 1255–1305 hrs, we saw a pitta-like bird flying across the road (26°40.039'N 93°21.706'E). We spotted the bird again, at closer distance, in some forest undergrowth, in a patch of woodland with prominent tree species like *Machilus banbycina*, with thick undergrowth of *Calamus* sp., and creepers such as *Lea* sp. It was immediately identified as Hooded Pitta, based on its dark head, and brownish crown. We took photographs of the bird (see below), which helped confirm its identity. We observed the bird for about two minutes, before it flew away into the thickets.

References

- Barua, M. & Sharma, P. 1999. Birds of Kaziranga National Park, India. *Forktail* 15: 47-60.
- Choudhury, A. 2003. *Birds of Kaziranga National Park. A checklist*. Guwahati: Gibbon Books & The Rhino Foundation for Nature in NE India.
- Grimmett, R., Inskipp, C., & Inskipp, T. 1999. *A pocket guide to the birds of the Indian Subcontinent*. Delhi: Oxford University Press.
- Kazmierczak, K. 2000. *A field guide to the birds of the Indian subcontinent*. London: Pica Press.
- Manakadan, R., & Pittie, A. 2001. Standardized English and scientific names of the birds of the Indian Subcontinent. *Buceros* 6 (1): i-ix, 1-38.
- Rasmussen, P. C. & Anderton, J. C. 2005. *Birds of South Asia: the Ripley guide: attributes and status*. Vol 2. Washington, D.C. & Barcelona: Smithsonian Institution & Lynx Edicions.



Udayan Borthakur

Hooded Pitta *Pitta sordida*

is found in the Great, and Little Nicobar Islands (Rasmussen & Anderton 2005). It is categorized under 'Least Concern' in the IUCN's Red List 2008.

Kaziranga National Park (KNP) (26°35'–26°45'N 93°05'–93°40'E) is situated in the floodplain of the Brahmaputra River, in the Nowgaon, and Golaghat districts of Assam, India. A detailed checklist of birds of Kaziranga National Park, with 479 species, has listed three species of pittas, namely, Blue-naped *P. nipalensis*, Blue *P. cyanea*, and Indian *P. brachyura* (Barua & Sharma 1999). Choudhury (2003) lists the Hooded Pitta as a hypothetical

—A flight down memory lane— Narcondam Island and its hornbills

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India's environmental problems are many and highly complex. Yet, unhappily, those of us who should know better have been verging on criminal casualness in our approach to conservation issues, often lending tacit support to groups that have their own, often highly political, agendas. The time is over ripe to put our house in order before we, individually and collectively, espouse causes and take on issue-based activism. It is absolutely essential that we prioritize our concerns.

In my opinion, the isolated Narcondam Island, with its endemic Narcondam Hornbill *Aceros narcondami*, merits overwhelming conservation priority. There should be no two opinions on the absolute need to secure this island recognition as one of India's wilderness treasures.

To safeguard its territorial integrity from over ambitious neighbours, the Government of India stationed a police contingent on the island in 1969. To provision the men with "fresh" milk and meat, two pairs of goats were sent in 1976! By 2000, their captive population was about 150 and over 200 had gone feral, grazing to devastation the hitherto undisturbed forest under-story and completely preventing vegetative regeneration. There are reports that areas around the settlement have been cleared for growing vegetables and trees are felled regularly for fuel! The process that has denuded much of the Indian subcontinent of its forest cover has begun here. Figuratively speaking, the kindling that has been set aflame will soon become a blaze and engulf the primeval forest that should be every Indian's pride. That the Indian Government, in this age of environmental enlightenment, has initiated this rather short sighted and thoughtless action simply amazes me. That there has been no outrage expressed by the otherwise very vociferous environmental groups, baffles me and, speaks volumes for the general apathy among us: yes, I include myself among the apathetic.

In 1979 I had sarcastically written in the *Indian Mountaineer*, the Journal of the Indian Mountaineering Foundation, that if the "Sanctuary" surrounding Nanda Devi in the Gharwal (Uttarakhand) Himalayas could not be prevented from vandalism, then India should forget all its commitments to conserving her National Parks, many of which have human activity and user rights for centuries. Those times, however, were different; we had a Prime Minister in Indira Gandhi, who in her imperious manner, simply ordered the mountain area closed.

Today, I throw a similar gauntlet to the Government of India, to declare this island a National Treasure and evolve imaginative strategies for its protection. India's territorial claim over Narcondam Is., I repeat, does not need a posse of policemen with their goats, it can be as effectively asserted by setting up a multidisciplinary research station commanded by a Naval officer. Efficiently regulated ecotourism would help finance research.

The unique island vegetation, specially the large old fig trees, is under continual devastation by recurring cyclones that are so characteristic of the Bay of Bengal, but they were able to hold their own thanks to the vigorous regeneration in clearings created with each large tree that fell. The introduction of goats has adversely



Narcondam Hornbill

Niranjan Sant

affected this regeneration and with each successive cyclone, the aging trees with their cavities will get depleted, without being replaced. It is the availability of tree cavities that determine the optimal breeding population of the hornbills and it is not difficult to visualize a time when they will be unable to breed in sufficient numbers. Without any delay, all goats must be removed and those gone feral, shot by a group of Army sharpshooters detailed on exercise!

The multidisciplinary research station should be provisioned with canned food, as is the Indian Antarctic one. Not only should the plant and animal life of the island be strictly preserved, the reefs encircling it should also be protected from all exploitation, barring ecotourism—with conducted and controlled dives among the reefs and nature trails up and around the supposedly extinct volcano; coveted, high value tourist experiences.

However, the volcano on Barren Island is active and frankly, too close for comfort. The recent series of tectonic tremors along the Indonesian island arc, of which the Andaman and Nicobar Islands are extensions, suggests that the endemic Narcondam Hornbills may sooner than later face calamity, especially due to breeding habitat eradication. Lt. Gen. Baljit Singh's note to the Government of India, suggesting the introduction of these hornbills to other uninhabited island/s, deserves our emphatic "Yeah!" provided rigorous science is implemented. I would go a step further and urge that captive breeding nuclei be established in a couple of reputed Indian zoos as well as in prestigious foreign ones so that, should the Narcondam volcano erupt, there would be birds to repopulate the island once it settles down.

Dedication: I would like to dedicate my piece to the memory of late Ravi Sankaran, whose quiet growth as a formidable field scientist, I had the privilege to watch. He spent many wonderful, and relaxed days with me at Hingol Gadh, whenever he visited Saurashtra to check on the Lesser Florican.

—Correspondence—

Departure of Grey Wagtail Motacilla cinerea from Kodagu

With reference to my letter published in vol. 3 no. 4 July–August 2007 issue of Indian Birds, regarding the arrival of the Grey Wagtail *Motacilla cinerea* in Kodagu (12°27'N 75°43'E; 1,310 m a.s.l.), the departure dates are very difficult to gather.

Below is my notebook record of when the birds were last seen in my garden.

Date	Time	Date	Time
24 April 199	0645 hrs	03 April 2004	1530 hrs
16 April 2000	1630 hrs	18 April 2005	1800 hrs
12 April 2001	0730 hrs	25 March 2006	0745 hrs
14 April 2002	0830 hrs	06 April 2007	0730 hrs
20 March 2003	1700 hrs	06 April 2008	1230 hrs

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—Editorial—

Will we force the Narcondam Hornbill Aceros narcondami into extinction?

Human actions, whether direct or indirect, are nowadays almost singularly responsible for nudging species towards their doom. Redemption from such a, potentially, lost cause lies in the adroit harnessing of resources, an assessment of the situation, the application of rigorous science, and hopefully, the forestalling of a threatened species careening towards extinction.

In India, vultures have been the hapless victims of a seemingly innocuous human act—that of using a drug as a painkiller for cattle—resulting in a population crash that teeters on the verge of extinction. Just ten years ago, who would have believed that E. H. Aitken's laudatory "unsalaried public servants"¹, would come to this? In the nick of time, the culprit that caused the vultures' drooping death was identified. If the drug were to be banned, its usage completely stopped, the vultures would have a slim chance of recovery. Banning a drug is difficult, enforcing that ban, a nightmare. A tug-of-war between players only erodes resolve into time-fed laxity—all at the expense of the vultures' future.

The Edible-nest Swiftlet *Collocalia fuciphaga* is found throughout southeastern Asia, but in India, it inhabits only the Andaman & Nicobar Islands. Its pure 'saliva' nest is a virtual delicacy in southeastern Asian cuisine, wherein lies its nemesis. Protecting the bird in the wild is impossible, given its preferred breeding terrain. The conservation solution is to ranch it in such a way that its eggs are slipped under surrogate Glossy Swiftlets *C. esculenta*, and its nest, harvested. A misinformed government order placed the Edible-nest Swiftlet in Schedule I of The Indian Wildlife (Protection) Act, 1972, thereby protecting it totally, and paradoxically, blocking the only scientific solution that would

ensure its continued survival on the islands. The only way forward was to remove the bird from Schedule I, allow its nest to be harvested, and prevent the species from becoming extinct (in India) by protection!

The third scenario is centered on the 6.82 km², volcanic, Narcondam Island—home to the endemic Narcondam Hornbill *Aceros narcondami*. In 1905 the population of hornbills on Narcondam was c200, in 1972 c400, in 1998 c360², in 2000 c432³, and in 2003 c340⁴. Why is this bird at a cul-de-sac, when its population has been more-or-less stable over one hundred years? The simple one-word answer is—goats. Lavkumar Khachar's article highlights this issue and the urgent need for action. Will we allow goats to eat an island from under the Narcondam Hornbill? Indeed, will we allow them to do what we sent a posse of policemen to prevent Myanmar from doing—take the island away from India? Without vegetation holding it together, the volcanic rock will erode over time. Today it may sound fatalistic to say that an island devoid of vegetation might not survive the vagaries of tropical weather, but water and wind are an unstoppably potent force of erosion—and this, a one-way street to environmental disaster.

Island natural histories are mortally susceptible to invasions of flora and fauna and the introduction of goats on Narcondam is an act of criminal negligence, a slap in the face of our cognitive intelligence. The immediate solution is to remove all the goats, both captive and feral, from Narcondam, by whatever means necessary—delay would be catastrophic; implementation might restore equilibrium over time.

Paradoxically we only learn about a critically threatened species when it is already slipping downhill. Narcondam, however, is a situation that can be rectified easily. Yet, it is more than a decade since the late Ravi Sankaran of SACON raised these concerns and alarms in a report published by the institution, as did the late S. A. Hussain of BNHS, in several publications. The Indian government has taken no corrective action up till now. It is still not too late in the day to salvage the situation. If there is quick action, the magnificent Narcondam Hornbill will certainly survive, in splendid isolation, on a wild volcanic outcrop jutting above the storm-tossed waters of the Bay of Bengal—the unquestioned icon of a potential Peace Park between India and Myanmar and a symbol of successful conservation.

—Aasheesh Pittie

- 1 Aitken, E. H. 1947. *The common birds of India*. 3rd ed. Bombay: Thacker & Co. Ltd.
- 2 Vijayan, L. & Sankaran, R. 2000. A study on the ecology, status and conservation perspectives of certain rare endemic avifauna of the Andaman and Nicobar Islands. Final report. Coimbatore: SACON.
- 3 Yahya, H. S. A. & Zarri, A. A. 2003. Status, ecology and behaviour of Narcondam Hornbill, (*Aceros narcondami*) in Narcondam Island, Andaman and Nicobar Islands, India. *J. Bombay Nat. Hist. Soc.* 99 (3): 434–445 (2002).
- 4 Vivek, R. & Vijayan, V. S. 2003. Ecology and conservation of the Narcondam Hornbill *Aceros narcondami* at Narcondam Island Sanctuary, India. Coimbatore: SACON.

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