Birds of the Sirumalai Hills

V. Santharam, Kumaran Sathasivam, T. Badrinarayanan & K. V. Sudhakar

Santharam, V., Sathasivam, K., Badrinarayanan, T., & Sudhakar, K. V., 2014. Birds of Sirumalai Hills. *Indian BIRDS* 9 (3): 57–63. V. Santharam, Institute of Bird Studies & Natural History, Rishi Valley 517352, Chittoor district, Andhra Pradesh, India. Email: *santharam.v@gmail.com* Kumaran Sathasivam, 29 Jadamuni Koil Street, Madurai 625001, Tamil Nadu, India. Email: *kumaran.sathasivam@gmail.com* [Corresponding author.] T. Badrinarayanan, 262, Second Main Road, Gomathipuram, Sivagangai Road, Madurai 625020, Tamil Nadu, India. Email: *badrinarayanant@gmail.com* K.V. Sudhakar, 10 South Leith Castle Street, Santhome, Chennai 600028, Tamil Nadu, India. Email: *kvsudha@gmail.com Manuscript received on 7 May 2013.*

Introduction

The Sirumalai Hills, or Sirumalais, are a range of hills in southern India. They are outliers of the Western Ghats, one of the biodiversity hotspots of the world. The point on these hills closest to the Western Ghats is just 15 km or so to the east of the Palni Hills. The Palnis run west to east, perpendicular to the Western Ghats proper. The Sirumalais and the Palnis both arise from the plains of Tamil Nadu. According to Foote (1883), the Sirumalai Hills (along with a few other hills near them), 'may be regarded geologically as an extension of the gneissic beds forming the Palani mountains.' The Sirumalais extend over an area that is c. 20 km long and 13 km wide, located in Dindigul district of Tamil Nadu, southern India. They are located to the north of Madurai and extend east from the vicinity of Dindigul. The Sirumalais are centered roughly at 10°13'N, 78°15'E (Fig. 1). The highest peaks in the Sirumalais rise to nearly 1400 m. However, most of the Sirumalais are of comparatively lower altitude. A plateau c. 1000 m high is a significant feature of the hills, and the slopes are fairly steep. The Sirumalais are one of the largest and highest hill ranges independent of the Western Ghats in Tamil Nadu. There are a few bird specimens from the Sirumalais at the Government Museum in Chennai, with no details such as their collection date or location. E. G. Nichols mentions, in passing, some birds seen here in his series of three articles (Nichols 1944a,b, 1945). Except for these records, we were not able to find any material on the birds of the Sirumalais. This lack of ornithological work in the Sirumalais motivated us to carry out a survey.

Through our survey we wished to draw up a checklist of birds of the Sirumalais and look at how the avifauna was distributed. We also wanted to compare the birdlife of this region with that of the adjacent Palni Hills (Sathasivam 2006).

Just when we began our survey, an article dealing with the avifauna of the Sirumalai Hills was published in *Indian Birds* (Swami 2006). And subsequently, we came across two other articles on the birds of the Sirumalais (Bundell 2010; Kumar 2007). Except for what may be gleaned from the four sources we have cited, no information is available about the bird life of the Sirumalai Hills.

History of study site

Historically, the Sirumalais have been noted for their great fertility. The great variety of fruits produced in abundance in these hills is said to be mentioned in the earliest Tamil poems (Francis 1906). But in the 19th century, the climate was known to be 'very malarious' (Francis 1906). This stood in the way of attempts to settle on these hills. A fever swept through the area in 1809–1810, causing such havoc that at one point only 89 people were

left on the Sirumalais. American missionaries based in Madurai built two bungalows in the Sirumalais with the intention of establishing a sanatorium there, but they abandoned the idea in 1845.

In the early years of the 19th century, timber trees of great size and height grew upon the Sirumalai Hills. But these were 'recklessly denuded' over the years. William Elliott, who was Judge of Madura from 1838 to 1840, introduced coffee in the Sirumalais. He obtained seeds and young plants from Mysore, and the labourers came up the hill every day to work, returning to their villages in the plains at night. The coffee grown in these hills was considered to be superior to that of the Palnis. In 1870, one Capt. E. A. Campbell experimented with mulberry trees and 'exotic cotton' in the Sirumalais on behalf of the Cotton and Silk Supply Associations.

In 1877–1878, Madura district experienced great damage on account of floods. Roads, the railway, and 950 tanks in Melur taluk alone were breached, and the District Collector attributed the destruction to the total bareness of the slopes of the Sirumalais.

By the beginning of the 20th century, the Sirumalais were famous for their plantains, which were said to be 'vociferously hawked at all the neighbouring railway-stations,' coffee, and cardamom (Francis 1906). All the fruit trees cultivated in the Lower Palnis were grown in the Sirumalai Hills as well. It might be mentioned that the 'hill banana' continues to be sold at Dindigul railway station to this day (Francis 1906).

Study area

The major human activity in the Sirumalais today is agriculture. The crops cultivated include coffee, banana, vegetables, and spices. Road connectivity is rudimentary. A single motorable road provides access to the villages of Pazhaiyur and Sirumalai Pudhur on the Sirumalai Plateau. There is a simple network of unmetalled roads branching off this road to the various hamlets and estates on the plateau. There is only a footpath to the settlement of Tholukadu. There are some infrequently used bridle paths running from the top of the Sirumalais to the plains.

The vegetation of the Sirumalais has been studied by J. M. Pallithanam (2001), who divided the vegetation of the Sirumalais into two groups: (1) that of the outer slopes; and (2) that of the plateau and hilltops.

The vegetation of the outer slopes, which rise from 250 m to 1000 m, consists of scrub forests, dry deciduous forests, savannah woodlands, dry evergreen forests, and riparian forests. The features observed with regard to the vegetation of the plateau and hilltops include semi-evergreen forests, dry deciduous forests, savannah woodlands, wet rocky slopes, ponds,

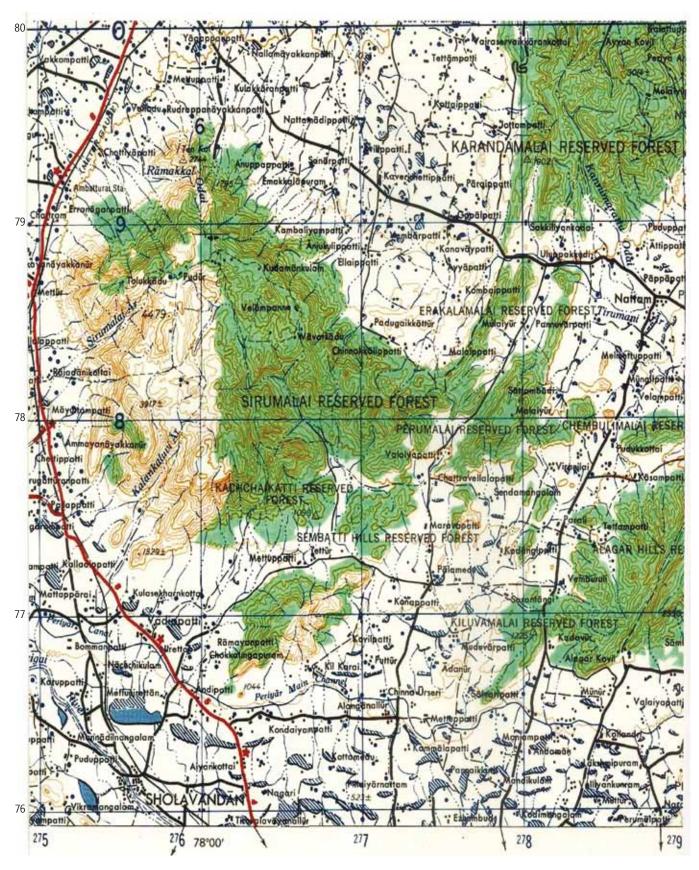


Fig. 1. Map of the Sirumalais. [After University of Texas at Austin's 1:250,000 Map "NC43-8 Dindigul"].

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The months from February to August are mostly dry. There are a few showers in April and May. There is a little rainfall in September, followed by the showers of the north-eastern monsoon, from the middle of October till the end of December. March to June or July is the hottest period. The temperature drops significantly with the arrival of the north-eastern monsoon. The average annual rainfall is 132 cm on the plateau and 120 cm on the slopes (Pallithanam 2001).

Survey dates

We chose the fieldwork dates so as to survey the area round the year, with emphasis on those periods when maximum bird movement within and outside the hills may be expected. Inclement weather during the north-eastern monsoon disrupted the schedule somewhat. Eventually we carried out six surveys, on the following dates:

- 13–15 August 2006
- 15 November 2006
- 9–11 February 2007
- 2-4 April 2007
- 4–6 July 2007
- 3–5 September 2007

Survey locations & methods

Using Pallithanam's description of the flora, we chose a set of sites that we believed would cover the Sirumalais well and had a representative range of habitats and altitudes (Appendix 2). We also used topographical maps and made enquiries with local residents to choose the survey sites. The list of locations we surveyed reflects these factors and the accessibility of the sites.

We recorded birds at each site and from the footpaths and roads. We identified birds on the basis of unambiguous sightings and calls.

Results & discussion

Considering the extent and height of the Sirumalai Hills, and their proximity to the Western Ghats, we had expected the Sirumalais to have a bird fauna typical of this biodiversity hotspot. However, the birdlife is relatively impoverished. This may be due to the fact that the Sirumalais rise to only about 1500 m, whereas the altitude of the Western Ghats is more than 2000 m in places, including in the Palnis. The other factors could be related to the theory of island biogeography, which states that fewer species are present on islands farther away from mainlands and on smaller islands (MacArthur & Wilson 1967). The Sirumalais, being isolated from the main Western Ghats ranges, although by only a short distance, are likely to have a smaller number of species compared with the Western Ghats and the Palnis. The latter are contiguous with the Western Ghats and are considerably larger in extent than the Sirumalais. They also have greater altitudinal and habitat ranges. Besides, the Sirumalais receive less rainfall than the Palni Hills, which get 90-190 cm (Balachandran & Rahmani 2005), being located on the leeward side of the southwest monsoon winds. As a consequence, there is more deciduous vegetation in the Sirumalais. The vegetation of the Sirumalais is also highly degraded, particularly on the plateau. Notwithstanding this, we recorded a total of 159 species (Appendix 1). Additional species recorded by other authors are discussed in the notes following the appendix.

The commoner birds include the Red-whiskered Bulbul Pycnonotus jocosus, Black Eagle Ictinaetus malayensis, Grey Junglefowl Gallus sonneratii, Greater Coucal Centropus sinensis, Malabar Parakeet Psittacula columboides, Coppersmith Barbet Megalaima haemacephala, Black-headed Oriole Oriolus xanthornus, White-browed Bulbul P. luteolus, Purple-rumped Sunbird Nectarinia zeylanica and Oriental White-eye Zosterops palpebrosa. Commensals of man such as crows Corvus spp., mynas Acridotheres spp., and the House Sparrow Passer domesticus were not very common or were absent on the slopes and at the top of the hills. Also absent from the Sirumalais are waterbirds, and this is mainly attributable to a lack of significant wetlands in the hills. We did not come across any hornbill species, whereas at least two species occur in the adjacent Palni hills (Sathasivam 2006). The woodpecker assemblage also seems highly impoverished, with just four species recorded. Three Western Ghats endemics occur in the Sirumalais: the Malabar Parakeet, the Indian Rufous Babbler Turdoides subrufa, and the Nilgiri Flowerpecker Dicaeum agile. We also found the Indian Swiftlet Collocalia unicolor, and the Yellow-browed Bulbul Iole indica, which are endemic to the Western Ghats and Sri Lanka. However, it is intriguing that we did not find birds such as the Malabar Small Barbet M. malabarica and the Jungle Myna A. fuscus though suitable habitats were available and these birds are found in the Palni Hills (Sathasivam 2006), so close by. We believe that some of the high altitude endemics, such as the Nilgiri Pipit Anthus nilghiriensis, are unlikely to occur in the Sirumalais.

Our checklist includes various rare and threatened species. The occurrence of the Mountain Hawk-eagle *Spizaetus nipalensis*, Northern House-martin *Delichon urbicum*, Indian Blue Robin *Luscinia brunnea*, Pied Ground Thrush *Zoothera wardii*, and Yellow-throated Bulbul *P. xantholaemus*, in the Sirumalais, is noteworthy.

Our discussions with residents of the Sirumalais indicated that hunting is prevalent in these hills. Birds may be threatened by this, as well as by habitat loss to plantations. It is possible that the use of pesticides in the plantations has an adverse effect on the bird life. The periodic occurrence of forest fires in the Sirumalais may also pose a threat to bird populations here.

Recommendations

On account of the limited access to suitable sites in the foothills and the slopes, our findings are somewhat biased towards the plateau (a list of locations surveyed by us is provided in Appendix 2). On the instances that we traversed footpaths going down the mountainside, we found them overgrown or unfamiliar to our guides, so that some altitudes were inaccessible to us at the times of the day when birds are most active. To survey these altitudes, it may be necessary to camp there in the future. Use of mistnets will help locate skulking birds.

The time spent by us at the few waterbodies of the Sirumalais was limited. It may be productive to spend greater effort at these places, namely Kadamankulam, Periapannai Kulam, and Sathiar Reservoir, particularly during the months immediately after the rains. We also need to monitor these hills on a regular basis as they may host passage migrants like the Pied Ground Thrush and several warbler species.

The Kanavaypatti foothills appeared promising in terms of relatively undisturbed stretches of vegetation. This section of the Sirumalais deserves ornithological attention for species that may occur in the open scrub and dry deciduous vegetation. We believe that eventually the checklist of the Sirumalais will grow to exceed 200 species since as explained earlier above, we have not been able to survey all the habitats thoroughly and over all seasons during this survey.

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Appendix 1: Annotated checklist of birds seen at Sirumalai Hills, 2006–2007.

Podicipedidae

Dabchick or Little Grebe Tachybaptus ruficollis Seen at Sathiar Reservoir.

Phalacrocoracidae

Great Cormorant *Phalacrocorax carbo* Seen at Sathiar Reservoir. Indian Cormorant or Shag *Phalacrocorax fuscicollis* Sathiar Reservoir.

Ardeidae

- Indian Pond Heron *Ardeola grayii* Recorded in the foothills, at Sathiar Reservoir and Kolinjipatti. Not seen at the Kadamankulam pond. They were seen at Periapannai in February (2–3 birds), and in April (3–4 birds).
- Eastern Cattle Egret *Bubulcus coromandus* Seen with other egrets at Sathiar Reservoir. Great Egret *Egretta alba* Recorded only at Sathiar Reservoir. None of the egrets were seen at the waterbodies in the plateau.

Intermediate Egret *E. intermedia* Sathiar Reservoir. Little Egret *E. garzetta* Sathiar Reservoir.

Accipitridae

Black-shouldered Kite *Elanus caeruleus* Recorded at the Kolinjipatti foothills.

Oriental Honey Buzzard Pernis ptilorhynchus Fairly common. Encountered at all altitudes.

- Black Kite *Milvus migrans* A flock seen near the foot of the hills from the Dindigul-Pazhaiyur road (July 2007).
- Shikra Accipiter badius Common. Seen at all elevations and in different habitats.
- Legge's Hawk Eagle *Nisaetus kelaarti* A single record on the track to Tholukadu. Mr. Narayan Swami found this species common in the Sirumalais. Also seen by Kumar (2007).
- Crested Hawk Eagle *S. cirrhatus* Two records from Kolinjipatti; seen once at Namaste Estate.
- Bonelli's Eagle *Hieraaetus fasciatus* A few records, all from the higher altitudes. Juvenile birds noticed in flight in July.
- Black Eagle *Ictinaetus malayensis* Very common. Recorded at practically all habitats and elevations.
- Short-toed Snake-Eagle *Circaetus gallicus* Recorded a few times, always at the lower elevations.
- Crested Serpent-Eagle Spilornis cheela Several records, from most habitats.

Falconidae

- Shaheen Falcon *Falco peregrinus perigrinator* One unconfirmed sighting near Kamakoti Estate.
- Common Kestrel F. tinnunculus Seen once on the track to Tholukadu.

Phasianidae

- Grey Francolin *Francolinus pondicerianus* Fairly common at the foothills. Not found anywhere up the slopes.
- Red Spurfowl *Galloperdix spadicea* Recorded at various altitudes, but more often at the higher elevations.
- Grey Junglefowl Gallus sonneratii Common at all altitudes as evident from the calls.
- Indian Peafowl *Pavo cristatus* Apparently common everywhere in the foothills. A couple of records from the plateau.

Turnicidae

Yellow-legged Button Quail Turnix tanki A few records from the savannah.

Rallidae

White-breasted Waterhen Amaurornis phoenicurus A single record from Periapannai pond.

Charadriidae

Yellow-wattled Lapwing Vanellus malabaricus Recorded only from Kolinjipatti. Redwattled Lapwing V. indicus We recorded this bird only at Sathiar Reservoir.

Scolopacidae

Green Sandpiper Tringa ochropus Found at Periapannai pond.

Columbidae

Rock Pigeon Columba livia Seen in the Kolinjipatti foothills area.

- Eurasian Collared Dove *Streptopelia decaocto* We have one record from the Kolinjipatti foothills and we heard the calls once from the Dindigul-Pazhaiyur road, but were not able to confirm this.
- Spotted Dove *S. chinensis* Not very common. We have records from Kamakoti and Namaste estates and from the Horticultural Station and Kolinjipatti.
- Little Brown Dove S. senegalensis Not common. A few records from the foothills.
- Emerald Dove *Chalcophaps indica* We found this species only at Namaste Estate, in riverine forest.

Psittacidae

- Rose-ringed Parakeet *Psittacula krameri* Fairly common in the foothills and lower elevations.
- Plum-headed Parakeet *P. cyanocephala* We recorded this species at various locations, all at the higher elevations except for Kolinjipatti.
- Malabar Parakeet P. columboides Relatively common at the higher altitudes, but not

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particularly numerous.

Vernal Hanging Parrot Loriculus vernalis Found everywhere in moist forest. Especially fond of flowering Erythrina.

Cuculidae

Pied Crested Cuckoo Clamator jacobinus One record, from the Kolinjipatti foothills.

- Common Hawk-Cuckoo *Hierococcyx varius* Widespread. We recorded this bird at all altitudes and habitats.
- Banded Bay Cuckoo *Cacomantis sonneratii* This appears to be a sparse resident of the plateau. Three records. Heard calls at the foothills in august 2006.
- Grey-bellied Plaintive Cuckoo *C. passerinus* Our records are all from the higher elevations. It is easily overlooked outside the season when it vocalises. Vocal in April 2007.
- Asian Koel *Eudynamys scolopacea* Very uncommon. We heard it once near Periapannai pond.
- Bluefaced Malkoha *Phaenicophaeus viridirostris* Common at the lower elevations, but we have one sighting from higher up at Aralikkadu in moist forest and cultivation, which is somewhat surprising for this species.
- Sirkeer Malkoha *P. leschenaultii* This appears to be a widespread species. We saw it at both the lower and higher elevations, including in the savannah.

Greater Coucal Centropus sinensis Common and widespread.

Strigidae

- Oriental Scops-Owl *Otus sunia* Apparently widespread at the higher elevations. We heard it in the night at Kamakoti and Namaste estates and at sunset at Vellimalai Koil.
- Indian Scops-Owl *O. bakkamoena* We heard the calls at Vellimalai Koil and at Kamakoti Estate.
- Jungle Owlet *Glaucidium radiatum* Less restricted to the higher elevations than the Scops and Collared Scops owls. We recorded it at Kolinjipatti.
- Brown Hawk-Owl *Ninox scutulata* Our only record of this species is from Namaste Estate, where we heard the calls in February 2007.
- Spotted Owlet Athene brama This bird seems to be restricted to the plains. We heard it calling from the foothills once.

Caprimulgidae

Jerdon's Nightjar Caprimulgus atripennis Widespread on the plateau.

Apodidae

Indian White-rumped Spinetail Zoonavena sylvatica Recorded in September.

- Alpine Swift *Tachymarptis melba* Three records. More than 25 birds seen in September 2007.
- Little Swift *Apus affinis* Seen once at Periapannai pond and once at Kolinjipatti in a heavy shower of rain.
- Asian Palm Swift *Cypsiurus balasiensis* Our only record is from the foothills near Kodai Road.
- Indian Swiftlet Collocalia unicolor Seen once in August and several times the next July.

Hemiprocnidae

Crested Tree Swift *Hemiprocne coronate* A few records covering all altitudes including the foothills.

Alcedinidae

Lesser Pied Kingfisher Ceryle rudis Recorded at Sathiar Reservoir.

Small Blue Kingfisher *Alcedo atthis* Found at Sathiar Reservoir, Kolinjipatti and Periapannai pond.

White-breasted Kingfisher Halcyon smyrnensis Widespread; found at all altitudes.

Meropidae

Chestnut-headed Bee-eater *Merops leschenaultia* Widespread at the higher elevations. Little Green Bee-eater *M. orientalis* Not uncommon; our records are from the plateau and from the Kolinjipatti foothills.

Coraciidae

Indian Roller *Coracias benghalensis* Only one record: from the foothills near Kodai Road.

Upupidae

Common Hoopoe *Upupa epops* Seen at various habitats including the savannah and the Kolinjipatti foothills.

Capitonidae

Brownheaded Barbet *Megalaima zeylanica* Commonly heard in the lower elevations. Whitecheeked Barbet *M. viridis* Very common in the moister vegetation of the higher elevations.

Coppersmith Barbet *M. haemacephala* Very common. Many records from all over the hills.

Picidae

Rufous Woodpecker *Micropternus brachyurus* Recorded at Kamakoti and Namaste estates and on the track to Tholukadu.

- Streak-throated Woodpecker *Picus xanthopygaeus* Fairly common. All altitudes except the lowest.
- Lesser Golden-backed Woodpecker *Dinopium benghalense* Common. Found at all elevations.
- Indian Pygmy Woodpecker *Dendrocopos nanus* Widespread at the higher elevations. Seen feeding on nectar of silver oak trees.

Pittidae

Indian Pitta *Pitta brachyura* Calls heard at Vellimalai Koil and at Namaste Estate. Not very common.

Alaudidae

Jerdon's Bush Lark Mirafra affinis Our only records are from the foothills.

Hirundinidae

Barn Swallow *Hirundo rustica* Not uncommon. Also seen at higher elevations. Red-rumped Swallow *H. daurica* Many records from all over the hills.

- Northern House Martin *Delichon urbicum* We saw less than half-a-dozen of these birds in a congregation of swallows and swifts at Periapannai pond in April 2007. They
- were apparently having a drinking of water before retiring at sunset. Dusky Crag Martin *Hirundo concolor* Seen at Thozhukkadu in July 2007.

Motacillidae

- Forest Wagtail Dendronanthus indicus Not common. Three records covering all elevations. Also seen in April (2007).
- Grey Wagtail *Motacilla cinerea* We found this bird at a few locations scattered across the hills. Seen on September 3, 2007 and in early April 2007.

White-browed Wagtail *M. maderaspatensis* Recorded only from Periapannai and the Kolinjipatti foothills.

Campephagidae

- Pied Flycatcher-Shrike *Hemipus picatus* We found this bird in a few locations at the higher elevations. Seen over half-a-dozen birds in a mixed hunting party in August 2006 at Namaste Estates.
- Malabar Woodshrike *Tephrodornis sylvicola* One unconfirmed record from the Horticultural Station.
- Common Woodshrike *T. pondicerianus* We found it very common at Kamakoti Estate in August. But subsequently we found it only at a few other locations.
- Large Cuckooshrike Coracina macei Found at all altitudes.

Orange Minivet *Pericrocotus flammeus* Seen at a few locations at the moist forests of the higher elevations.

Black-headed Cuckooshrike *C. melanoptera* We have records from Kalankaluvi Ar Valley, Namaste Estate and Velampanne.

Monarchidae

- Asian Paradise-flycatcher *Terpsiphone paradisi* Recorded only from the lower elevations (August 2006). Suspected by Nichols to be a resident as birds were at the base of the Sirumalai hills in July/August.
- Black-naped Blue Monarch *Hypothymis azurea* Widespread. Mostly in the higher elevations, but we found it at Kolinjipatti and Kannimaan Oothu.

Rhipiduridae

White-browed Fantail Rhipidura aureola Pair at Namaste Estate in the drier forests.

Pycnonotidae

- Red-whiskered Bulbul *Pycnonotus jocosus* The commonest bird of the Sirumalais. Found everywhere. Nest with young seen in February 2007.
- Red-vented Bulbul *P. cafer* Very common and widespread. More often seen in the lower, drier and open forest areas and in the savannah areas on the plateau. Nest in a bush (construction stage) in February 2007 close to the Redwhiskered Bulbul's.
- Yellow-throated Bulbul *P. xantholaemus* Restricted to a narrow altitudinal range. Recorded from the Dindigul-Pazhaiyur road, the Tholukadu track and near Kannimaan Oothu.

White-browed Bulbul P. luteolus Common. Found at all altitudes.

Yellow-browed Bulbul *lole indica* Found mostly at the upper elevations but also at the Kolinjipatti foothills.

Aegithinidae

Common Iora Aegithina tiphia Fairly common. Found at all altitudes.

Chloropsidae

- Gold-fronted Leaf-bird *Chloropsis aurifrons* Seen at Kamakoti Estate and near Thalaikadai. One unconfirmed record from the Horticultural Station.
- Jerdon's Leaf-bird *C. cochinchinensis* More common than the Goldfronted Chloropsis. Seen at a number of locations.

Laniidae

- Bay-backed Shrike *Lanius vittatus* We found this bird in the foothills at Kolinjipatti and near Kodai Road.
- Brown Shrike L. cristatus We have just a few records. Found from the foothills up to the top. A single bird noticed in April 2007.

Turdidae

- Malabar Whistling-Thrush *Myophonus horsfieldii* Not confirmed. Calls heard once at Karuppukoil and a flying bird seen near Vellimalai Koil. Mr. Narayan Swami reports this species to be common.
- Pied Ground-Thrush Zoothera wardii Two records, the first one of a male near Pazhaiyur (February) and the second one of a female near Meenakshi Estate (April).
- Orange-headed Thrush Z. citrina We heard what we believe is the call of this species at Vellimalai Koil once. The record is not confirmed. Reported seen by Bundell (2010).

Muscicapidae

- Asian Brown Flycatcher *Muscicapa dauurica* Not common. Recorded at Namaste Estate and on the track to Kodai Road from Kamakoti Estate. Juvenile bird seen August 2006.
- Brown-breasted Flycatcher M. muttui Our only records are from Rajaram Pallam, Poonjolai and Kolinjipatti.
- Red-throated Flycatcher Ficedula albicilla One record from Karuppukoil.
- Blue-throated Flycatcher *Cyornis rubeculoides* Recorded from near the stream at the Kolinjipatti foothills in November.

Tickell's Blue Flycatcher C. tickelliae Widespread at the higher elevations.

Indian Blue Robin Luscinia brunnea Three records, from Rajaram Pallam, Agasthiarpuram

and Meenakshi Estate (February and April, 2007).

Oriental Magpie-Robin *Copsychus saularis* Common bird found at all elevations. White-rumped Shama *C. malabaricus* Not always seen, but calls heard at a number of locations. Apparently widespread.

Pied Bushchat Saxicola caprata Found in the foothills; one record from Periapannai. Indian Black Robin Saxicoloides fulicatus A few records from the foothills.

Timalidae

Puff-throated Babbler Pellorneum ruficeps Common and widespread.

- Indian Scimitar Babbler *Pomatorhinus horsfieldii* Recorded from a number of locations, mostly at the higher elevations.
- Tawny-bellied Babbler Dumetia hyperythra Found at nearly all altitudes.
- Yellow-eyed Babbler Chrysomma sinense Our only record is from the Kolinjipatti foothills.
- Indian Rufous Babbler Turdoides subrufa A few records from the plateau.
- Jungle Babbler T. striata Common in most parts of the hills.

Pale-headed Babbler T. affinis Common in the foothills.

Brown-cheeked Fulvetta Alcippe poioicephala Calls heard at Kamakoti Estate once. Not confirmed.

Cisticolidae

Grey-breasted Prinia *Prinia hodgsoni* Common and widespread.Seen in breeding plumage and in song in July 2007, August 2006 and September 2007.

- Jungle Prinia *P. sylvatica* Recorded twice at the lower elevations.
- Ashy Prinia P. socialis Recorded once, the calls being heard at Kolinjipatti.

Common Tailorbird Orthotomus sutorius Common everywhere.

Sylviidae

Thickbilled Warbler Acrocephalus aedon Uncommon. Recorded at two locations in April.

- Blyth's Reed Warbler A. dumetorum Widespread in April. Only two other records in other months.
- Booted Warbler Hippolais caligata Our only record is from Kanavaypatti in February.

Large-billed Leaf-Warbler *Phylloscopus magnirostris* We found this bird at the Kolinjipatti foothills in November. Subsequently we recorded it only at Namaste Estate.

- Greenish Leaf-Warbler *P. trochiloides* Not very common, but our records are from all elevations (seen in early September 2007).
- Green Leaf Warbler P. nitidus Couple of birds noticed at Namaste in April 2007.

Western Crowned Warbler *P. occipitalis* We saw this bird once at Rajaram Pallam and once at Namaste.

Paridae

Great Tit Parus major Sparsely distributed over the hills.

Sittidae

Velvet-fronted Nuthatch Sitta frontalis Not uncommon in the higher elevations.

Dicaeidae

Thick-billed Flowerpecker *Dicaeum agile* The least common of the flowerpeckers in the Sirumalais. One record each from Kamakoti and Namaste estates.

Tickell's Flowerpecker *D. erythrorhynchos* Common. Found at all elevations. Nilgiri Flowerpecker *D. concolor* Less common than former.

Nectariniidae

Purple-rumped Sunbird Leptocoma zeylonica Common. Found everywhere.

- Loten's Sunbird *Cinnyris lotenia* Found at all altitudes. Common. Probably breeding (Feb 2007). Appeared very common in February (2007).
- Purple Sunbird C. asiatica Widespread. In eclipse plumage in August 2006.

Zosteropidae

Oriental White-eye Zosterops palpebrosus Common at the higher elevations. Seen collecting nest material in February 2007 Mating also noticed in April 2007.

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Estrildidae

Indian Silverbill Euodice malabarica One record from Kolinjipatti.

White-rumped Munia Lonchura striata Two records: from Vellimalai Koil and from near the stream at Kolinjipatti.

Scaly-breasted Munia L. punctulata Three records from scattered locations.

Ploceidae

Baya Weaver *Ploceus philippinus* Found at the Kolinjipatti foothills, where it appears to be abundant.

Sturnidae

Black-headed Myna Sturnus pagodarum Seen only at Kolinjipatti.

Common Myna Acridotheres tristis Seen at various locations, but not particularly common.

Oriolidae

Golden Oriole *Oriolus kundoo* We have just a couple of records: from Pudur and Karuppukoil.

Blackheaded Oriole O. xanthornus Common. Found at all altitudes.

Irenidae

Fairy Bluebird Irena puella Fairly common at the higher elevations.

Dicruridae

Black Drongo Dicrurus macrocercus Found only at the foothills.

- Ashy Drongo D. leucophaeus A few records from well wooded areas.
- White-bellied Drongo *D. caerulescens* Widespread; our records are mostly from the higher elevations.

Bronzed Drongo *D. aeneus* Common in the moist forests of the upper elevations.

Greater Racket-tailed Drongo *D. paradiseus* We saw these birds only twice, both times at Meenakshi Estate.

Artamidae

Ashy Swallow-Shrike Artamus fuscus Seen at many locations, at all altitudes.

Corvidae

Rufous Treepie *Dendrocitta vagabunda* Fairly common everywhere.

- House Crow *Corvus splendens* Seen only at Kolinjipatti and at Thalaikadai. Not established in the hills. According to Bundell (2010) these birds were not seen here even as recently as 1980.
- Jungle Crow C. macrorhynchos Uncommon, but we recorded small numbers at various locations. Bundell (2010) these birds were not seen here even as recent as 1980.

Notes:

- Bundell (2010) includes the Mountain Imperial Pigeon Ducula badia in his list based on secondary data.
- Green Imperial Pigeon *D. aenea* was **s**een by Nichols (1944-45) at the foot of the Sirumalais.
- Bundell (2010) includes the Large Green-billed Malkhoa Phaenicophaeus tristi this is obviously through oversight!
- Bundell (2010) includes the Mottled Wood-owl Strix ocellata based on secondary data.
- The Great Eared Nightjar *Eurostopodus macrotis* is a rare bird recorded in the higher elevations of the Palnis. Narayan Swami found the species to be common in the Sirumalais. We did not encounter it during the survey. Narayan Swami has recorded the Ceylon or Sri Lanka Frogmouth *Batrachostomos moniliger* in the Sirumalais. He was able to study a specimen knocked down by a vehicle. We searched for this species but were unsuccessful in finding it.
- Blue-tailed bee-eater *Merops philippinus* has been **s**een by Nichols (1944-45) at the base of Sirumalai.
- The Heart-spotted Woodpecker *Hemicircus canente* has been included by Bundell (2010) on the basis of secondary data.

Kumar (2007) recorded the White-naped Woodpecker Chrysocolaptes festivus. Kumar's (2007) record of Long-tailed Minivet Pericrocotus ethologus and Great Barbet

- Megalaima virens in the Sirumalais are cases of oversight or mistaken identity. Verditer Flycatcher Eumyias thalassina was seen by Kumar (2007).
- The Nilgiri Flycatcher *E. albicaudatus* has been recorded in the Sirumalais by Narayan Swami. He considers it uncommon. We did not come across this species. It has also been reported by Kumar (2007).
- The Grey-headed Canary Flycatcher *Culicicapa ceylonensis* is included in the Sirumalais list by Bundell (2010) on the basis of secondary information.
- Bundell (2010) includes the Black-headed Munia Lonchura malacca in his list on the basis of secondary data.

Appendix 2: Gazetteer of locations and habitats

- Agasthiarpuram (10°13'N, 77°58'E; 1181 m): Eucalyptus stands, dense undergrowth of lantana.
- Aralikkadu (10°11'N, 78°00'E; 1072 m) and Chandra Estate: Agricultural land (banana, jackfruit and silk cotton cultivation) and some dense moist forest.
- Dindigul–Pazhaiyur road (Pazhaiyur–10°14'N, 78°00'E; 1118 m): Scrub with dense shrubs and occasional trees, changing gradually to deciduous forest.
- Horticultural Station (10°11'N, 77°59'E; 1064 m): Riverine habitat; many old and tall trees; introduced trees including eucalyptus, pine and *Grevillea*.
- Kalankaluvi Ar Valley (10°12'N, 77°58'E; 1106 m): Chow chow plantations on either side of stream; small patches of natural vegetation with tall trees.
- Kamakoti Estate (10°12'N, 77°58'E; 1218 m) and Vinayagar Koil (coordinates and altitude not recorded): Coffee, *Grevillea*, garden plants, pepper, degraded savannah.
- Kanavaypatti foothills (coordinates and altitude not recorded): Scrub forest; deciduous forest with a few tall trees; extensive planting of *Acacia planifrons*.
- Karuppukoil village (10°09'N, 77°59'E; 1166 m): Sacred grove; a few old trees; riverine habitat; cultivation.
- Kolinjipatti foothills (10°09'N, 78°03'E; 275 m): Riverine forest (including tall *Terminalia arjuna*, mango, *Albizzia lebbek* and tamarind trees); deciduous forest; fruit and coconut plantations.
- Kutladampatti Falls (10°07'N, 78°01'E; 307 m): Overgrown scrub; riverine forest; occasional tall trees; waterfalls; intense human presence.
- Loyola (Ayyanar) Estate (coordinates and altitude not recorded): Coffee and *Grevillea* in savannah.

Meenakshi Estate: As in Sirumalai Pudur.

- Namaste (Kandighe) Estate (10°10'N, 77°58'E; 988 m): Riverine habitat; savannah; vegetable cultivation; large stretches of dense deciduous forest (one of the very few such places we saw).
- Periapannai Kulam (10°14'N, 78°00'E; 1124 m) and Kadamankulam (10°14'N, 78°01'E; 1113 m) ponds: Open waterbodies, no visible aquatic vegetation; possible inflow of sewage. Landscaping in vicinity of Periapannai.
- Poonjolai (10°11'N, 77°58'E; 986 m): Abandoned coffee estate: tall *Grevillea*; some old *Ficus* and other native trees; some riverine patches, resembling Kalankaluvi Ar valley.
- Pudur–Tholukadu (Tholukadu Malai peak–10°14'N, 77°57'E; 1126 m) track: Belt of plantations with jackfruit and silk cotton; occasional rocky outcrops with grass; patches of dense forest.
- Rajaram Pallam (10°13'N, 77°58'E; 1184 m): Riverine, dense deciduous forest; some large (planted) trees; banana plantations.
- Sathiar Reservoir (coordinates and altitude not recorded): Open waterbody surrounded by degraded, low scrub jungle.
- Savannah between Namaste and Loyola estates: Short grass with intervening trees of medium height. The secondary forest between Namaste and the savannah has taller grass and a dense growth of lantana on the sides of the tracks.
- Sirumalai Pudur (Meenakshi Estate) (10°14'N, 77°58'E; 1183 m): Plantations of coffee, Grevillea and pepper; Ficus trees; habitations.
- Tenmalai village (10°11'N, 77°59'E; 1059 m): Chow chow plantations.
- Thalaikadai (10°12′N, 78°01′E; 818 m): Betel nut and jackfruit cultivation; some forestland.
- Thenkuzhi Pallam (coordinates and altitude not recorded): Savannah with some large old trees
- Track to Kodai Road from Kamakoti Estate via Kannimaan Oothu: Mixture of habitats: riverine, deciduous, savannah (tall grass), thorny scrub (*Acacia and Prosopis*).
- Vellimalai Koil (10°14'N, 77°59'E; 1115 m): Mixed habitat: stream, dense lantana, tall Grevillea and coffee, open areas.