? \* Asian Brown Flycatcher Muscicapa dauurica: Spotted once near Sunset Point, catching insects, attracted to flowering mango Mangifera indica on 25.iii.2001 (Sangha & Devarshi 2004).

**Red-throated Flycatcher** *Ficedula parva*: Winter visitor. Only three sightings on 20.i.2002, 21.ix.2002 and 6.xii.2002. In contrast Butler (1875) described it as the "commonest bird at Mount Aboo in cold weather".

**Tickell's Blue-Flycatcher** *Cyornis tickelliae:* Resident. Widespread and quite common.

\* Grey-headed Flycatcher Culicicapa ceylonensis: Winter visitor. Only one sighting on 19.i.2002 near Sunset Point. Not recorded by Butler (1875).

Asian Paradise-Flycatcher Terpsiphone paradisi: Summer visitor. Arrives around mid–March and moves down by end of September. A white male was seen at Mini Nakki on 26.iii.2001. Singles (plumage? White?) were seen again on 19.v.2001, 10.v.2002 and 21.ix.2002. Interestingly, Butler (1875) "never met with one in white plumage".

White-spotted Fantail-Flycatcher *Rhipidura* albogularis: Resident. Common. Counted ten individuals on 20.i.2002, feeding on flies at a garbage dump near the Samni Gate of the Sanctuary. On 7.xii.2002, on the slope facing Anadra, a single bird was recorded at *c*. 530 m above m.s.l.

**Great Tit** *Parus major*: Resident. Uncommon. Recorded a few times near Honeymoon Point, Chhipaberi and Sunset Point. One was observed feeding four chicks at Arna (Jugal Tiwari, verbally). Butler (1875) mentions that it "occurs sparingly".

**Indian Yellow Tit** *Parus aplonotus*: Resident. Common

\* Thick-billed Flowerpecker Dicaeum agile: Resident. Four sightings on 21.ix.2002, 7.xii.2002, 15.iii.2003 (courting pair) and 18.vi.2005. Not recorded by Butler (1875).

**Purple Sunbird** *Nectarinia asiatica*: Resident. Common. Some males assume breeding plumage by mid–January. Nesting begins by the end of March.

**Oriental White-eye** *Zosterops palpebrosus*: Resident. Common.

**Crested Bunting** *Melophus lathami*: Resident. Only three sightings of one / two birds on 20.v.2001, 11.v.2002 and 20.vii.2002. Butler (1875) described it as "one of the commonest birds of Mount Aboo".

\* Rock Bunting Emberiza cia: Vagrant. One bird was seen feeding at Sunset Point on 14.iii.2003. (Sangha & Devarshi in press).

**Grey-necked Bunting** *Emberiza buchanani*: Winter visitor. Uncommon / rare. Only one individual was observed on 19.i.2002 near St Mary's School. Recorded by Butler (1875) as "not very common".

\* White-capped Bunting Emberiza stewarti: Winter visitor. Uncommon. Five birds were seen at Salgaon on 20.i.2002 and three in the Sanctuary on 21.i.2002. Not recorded by Butler (1875).

Common Rosefinch Carpodacus erythrinus: Winter visitor and passage migrant. Up to 13 were seen on 20.i.2002 and six on 26.iii.2003. Butler (1875) noted it as "very plentiful at Mount Aboo in the cold weather".

Green Munia Amandava formosa: Resident. Not uncommon throughout the study area. Two loose flocks (8+5) were observed feeding on grass seeds on the track in the Sanctuary on 20.i.2002, two to three birds near Oria on 20.vii.2002, nine in a lantana-infested area near St Mary's School on 8.xii.2002, more than 24 feeding in the soccer field of St Mary's School on 16.iii.2003 and five on 18.iii.2005 in the Sanctuary. Although from time to time various observers have claimed discovery of 'new' sites at Mount Abu, the species is present throughout the study area. At Achalgarh an unusually "large flock of 50" birds has been recently reported (Mehra & Sharma 2004). The species is absent in Mount Abu during August-October. The birds probably descend to the foothills where agriculture is prominent (Tiwari & Tiwari 2005). Butler (1875) found it "common".

White-throated Munia Lonchura malabarica: Resident. Common. Usually in small flocks, but once 30–strong at Salgaon on 20.i.2002. Butler (1875) noted it as "very common".

Spotted Munia Lonchura punctulata: Resident. Not uncommon. Nidification was noted on 13.viii.2001. Two pairs were observed bringing maize leaves and, twice, cloth rags, for constructing nests in date palms (scientific name) near Doodhia Nullah and Gujarat circuit house. Although Butler (1875) noted it as "common, and associating in large flocks in hot weather" we observed it only in small numbers.

**House Sparrow** *Passer domesticus*: Resident. Common near human habitations.

**Yellow-throated Sparrow** *Petronia xanthocollis*: Resident. Not uncommon. In spring numbers began to increase. On 14.iii.2003 they were in good numbers on flowering *Erythrina* 

indica trees. All but few disappear after autumn. Breeds in April / May. Butler (1875) found it "very abundant at Mount Aboo" and breeding in April.

**Brahminy Starling** *Sturnus pagodarum*: Summer/monsoon visitor? All our sightings are from summer and monsoon months. Butler (1875) found it "common at Mount Aboo".

Rosy Starling Sturnus roseus: Passage? A flock of about 200 birds was seen flying in the valley near Arna in July 2004 (Jugal Tiwari verbally). Butler (1875) found it "not so plentifully, on the hills".

**Common Myna** *Acridotheres tristis*: Resident. Common and usually confined to Mount Abu town

Indian Golden Oriole Oriolus kundoo: Summer visitor. All sightings during May. Once on 11.viii.2001. Butler (1875) noted that it was present, "both on the hills and in the plains," but was "not plentiful".

- ? **Black Drongo** *Dicrurus macrocercus*: Only two sightings on 25.iii.2001 and 7.xii.2002 in the Sanctuary. Butler (1875) found it "somewhat scarce on the hill"
- \* Ashy Drongo Dicrurus leucophaeus: Winter and passage migrant. Irregular and uncommon. Single birds were seen on 26.iii.2001 and 7.xii.2002. Six birds on a flowering Eucalyptus tree in the forest rest house compound, on 14.iii.2003. Not recorded by Butler (1875).

White-bellied Drongo Dicrurus caerulescens: Resident. Not uncommon. Commoner than the previous two species.

**Indian Treepie** *Dendrocitta vagabunda*: Resident. Common.

\* House Crow Corvus splendens: Vagrant. Only one sighting on 7.xii.2002, on the slope facing Anadra at an altitude of c. 860 m above m.s.l.

**Indian Jungle Crow** *Corvus* [*macrorhynchos*] *culminatus*: Resident. Common. A pair was observed incubating near Trevor Tank on 21.v.2002.

# Breeding of Long-billed Vulture *Gyps indicus* at Ramanagaram hills, Karnataka, India

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The hills of Ramanagaram  $(12^{\circ}07-12^{\circ}58'N 77^{\circ}08'-77^{\circ}25'E)$  are located to the south-west of Bangalore (Karnataka, India). They stretch for c. 75 km from south of Magadi till a little north of Kollegal and are c. 25 km wide from around Ramanagaram to the west of Kanakapura. This ancient range dates from the Lower Proterozoic, making them c. 2,600–2,000 million years old (Kamath 1982). They are home to a large

variety of flora and fauna, and their forest-covered (Tropical Thorn Scrub and Drydeciduous) slopes are of great ornithological importance, supporting over 150 species of birds belonging to over 40 families, including the endemic Yellow-throated Bulbul *Pycnonotus xantholaemus* and the critically and globally endangered Longbilled Vulture *Gyps indicus* (*pers. obs.*, Subramanya et al. 2005). They form part of

the Important Bird Area (IBA) network in India (Islam & Rahmani 2004).

Once widespread across India in particular and South Asia in general, vultures showed a shocking decline over the last one and half decades (Prakash et al. 2002b). Since 1990, vulture populations have dropped by over 90 per cent, with population losses of more than 98 per cent reported in many areas. These vultures (three species of Gyps vultures namely, the Oriental White-backed G. bengalensis, Long-billed G. indicus, and Slender-billed G. tenuirostris) are now listed as critically endangered species (BirdLife International 2001). This catastrophic decline has been linked to kidney failure, resulting from the use of the anti-inflammatory drug "diclofenac" on domestic livestock (Oaks et al. 2004, Arun & Azeez 2004). However, the cause of such a colossal loss of vulture population is still being debated upon (Prakash et al. 2002a, Satheesan 2004, 2005, Germi 2005).

Ramanagaram hills have been a home to critically and globally endangered vulture species for a long time (pers. obs.; Subramanya 2004). Recently, eight Longbilled Vultures were observed on the ledges of the steep and high rocky cliffs in Ramadevarabetta State Forest, close to Ramanagaram town, located c. 45 km southwest of Bangalore (Joseph 2005, Prashanth 2005, Subramanya & Naveein 2005). The birds seemed healthy. These vultures, according to the Bombay Natural History Society, appear to be the only known and last surviving population of the species in inland southern India (Vibhu Prakash verbally, June 2005).

The survival of this small population of vultures gives hope that its entire population may not have been lost in this part of the country. It is quite possible that this isolated population has been able to resist the effects of agents that have almost decimated the species elsewhere or may not have been exposed to the same. Considering the importance of this isolated population, the birds were monitored during the breeding season of 2005–2006. This note highlights the nesting of this critically endangered species in the area. The present observations are part of a much larger study of the birds, specifically vultures in the Ramanagaram Hills region.

### **Nesting area**

Ramadevarabetta State Forest, spread over

an area of c. 5 km², comprises of three hill complexes, the largest being the Ramadevarabetta complex, with six peaks of varying heights (highest 934 m). This is an important Hindu pilgrimage centre, with a temple on top of the hill and is frequented by devotees from surrounding villages and towns and even distant cities.

### **Nests and Nest-sites**

Nests were observed on a steep-sided cliff, located on the southern side of the Ramadevarabetta hill complex. The nests were constructed about 35 m from the ground and were quite inaccessible to humans either from the ground level or from the top of the cliff. A total of three nests were observed between January–February 2006. Two of the nests were on horizontal rocky ledges, while the third was within a deep cavity above another ledge on the cliffside. Two of the nests that were clearly visible, comprised of neat piles of twigs and grasses. The rocks around the nests were copiously coated with white excrements, in addition to several sections of ledges and cavities that were used as perching sites. An adult was always present near the nest containing nestlings. No efforts were made to approach the nests, observations being through a telescope placed c. 65 m away from the base of the cliff.

On 26.ii.2006 there was a month-old chick each, in two nests. Both were covered in white fluffy down, seemed quite sedentary, but occasionally exercised their wings by stretching them both, horizontally and vertically, and even flapping them. During that visit, an adult seemed to be incubating an egg in the third nest.

Visit to the site on 12.iii.2006 revealed the commencement of a new nest close to the cavity that held one of the nestlings. Both the nestlings appeared to be in good heath and were observed moving around the nest area. A total of nine adults were observed perched on the ledges and later flying around the hill-tops. On 9.iv.2006, ten adults were observed, either perched on the ledges or soaring on the thermals. Both the nestlings had grown-up to adult size and appeared healthy. No sign of the nest with the incubating bird observed on 26.ii.2006 could be seen, while a bird continued to incubate at the new nest, observed on 12.iii.2006.

This is the first breeding record of Longbilled Vultures, from inland Karnataka, since the outbreak of the "Vulture Crisis" (Prakash 2002b) in India. This IBA site assumes additional importance as populations of Long-billed Vultures, known from other localities in Bangalore and Tumkur districts of Karnataka, have been wiped out (*pers. obs.*).

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# Sun-bathing by Yellow-legged Green-Pigeon *Treron phoenicoptera* at Vadodara, Gujarat, India

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[With one colour photo online: www.indianbirds.in]

### Introduction

The Yellow-legged Green-Pigeon Treron phoenicoptera, commonly known as 'green pigeon', is a widespread resident of India (Ali & Ripley 1983; Grimmett et al. 1998). It is largely arboreal, but descends to the ground occasionally. It feeds on drupes, berries and wild figs of numerous species of Ficus. It keeps in flocks of 5–10, sometimes congregating in larger numbers to gorge on ripe banyan Ficus benghalensis or peepul F. religiosa figs in company with the other birds (Ali & Ripley 1983). In this note I record an instance of mass sun-bathing of the green pigeon, on a single tree in Vadodara.

Vadodara city (22°18'N 73°10'E), in Gujarat (India), famous for its heritage of large numbers of banyan trees, is a good habitat for green pigeons. They are common in areas like the Maharaja Sayajirao University of Baroda campus, Harni,

Laxmivilash Palace campus, Lal Baug, and railway station in flocks of two to forty (*pers. obs.*), perching on *Ficus* trees. However, it is difficult to spot perched birds as they get camouflaged in the surrounding leaves.

### **Observations**

On 21.xii.2005, at 07:30 hrs, I counted 89 fluffed-up Yellow-legged Green-Pigeons sun-bathing on the branches of a dry and leafless *Cassia siamea*. The tree is located in the Oil and Natural Gas Corporation (O.N.G.C.) campus, in Tarsali area (22°15'N 73°12'E), about 9 km from Vadodara railway station. The same number of birds was counted again at 08:15 hrs and 09:30 hrs. All the birds had oriented themselves, at an angle to face the sun. Their feathers were fluffed and they perched close to the branch, covering their tarsi with feathers. Their necks too were retracted into the fluffed feathers. They had left by 10:30 hrs, when

the temperature was about 15°C. The minimum ambient temperature of previous night was 9.8°C.

The green pigeons were seen perched on the dry tree only in the morning, and recorded continuously for 19 days from 21.xii.2005 to 8.i.2006 on that tree. However, their number and duration of perching varied (Table 1). The minimum ambient temperature during this period varied between 9.8°C and 12.4°C. No other activity was observed at this time, except occasional preening. The birds perched till 09:30 hrs on cool days unless they were forced to fly due to some disturbance.

## Discussion

The dry *Cassia siamea* was adjacent to *Pithacelobium dulce*. Besides this the entire area of O.N.G.C. and Baroda dairy campus is full of vegetation such as *Peltoforum*, *Cassia*, *Prosopis*, Neem, Peepul, Banyan

Table: Sun-bathing by Yellow-legged Green-Pigeon					
Date	Time (hrs)	No. of birds	Date	Time (hrs)	No. Of Birds
21.xii.2005	07:30	89		07:10	2
	08:15	89	29.xii.2005	07:45	2
	09:15	89		09:00	5
	10:30	0	30.xii.2005	07:45	12
22.xii.2005	08:15	90	31.xii.2005	07:45	15
23.xii.2005	07:45	89	1.i.2006	09:00	36
24.xii.2005	07:15	90	2.i.2006	07:45	15
	09:30	87	3.i.2006	07:45	15
	10:15	0	4.i.2006	08:20	25
25.xii.2005	07:15	92	5.i.2006	07:45	45
	08:15	90	6.i.2006	08:30	60
	08:45	0	7.i.2006	08:15	15
26.xii.2005	07:10	88	8.i.2006	08:30	30
	09:15	0		09:00	30
27 xii 2005	07:45	60		09:40	0
5	07:45	15			
	09:30	40			