

Sightings of Indian Hornbill in Mehsana District

Sr. No	Date	Location	No. of Individuals	Remarks
1	13 December 2016	Behind Arbuda Temple, Mehsana-Visnagar Highway	1	Sub Adult
2	28 May 2016	Khandosan Village, Visnagar Taluka	1	Adult
3	19 April 2017	Near Hotel Amrit, Nr. Chhatral	1	Adult
4	4 October 2017	Sundhiya Village, Visnagar Taluka	1	Adult
5	24 June 2018	Near Pilvai Village, Mehsana-Vijpur Highway	1	Adult
6	28 August 2018	Near ICICI Bank, Mehsana City	1	Adult
7	1 September 2018	Author's Home	1	Adult
8	8 September 2018	Author's Home	2	Adult
9	19 September 2018	Circuit House, Mehsana	1	Juvenile
10	30 September 2018	Vadnagar	3	Adult

watchers in the same region, including Balaram Sanctuary and at Dantiwada Dam. A successful nesting was observed by Kailash Jani in Palanpur City on 20 June 2018. My first sighting of Indian Grey Hornbill in Mehsana was on 13 February 2016. Then onwards, the number of sightings, with photographs, noted by me in Mehsana City and District are given here.

Conclusion

Earlier, this species was mainly seen in the jungle area only but now, the numbers of sightings noted in urban areas have

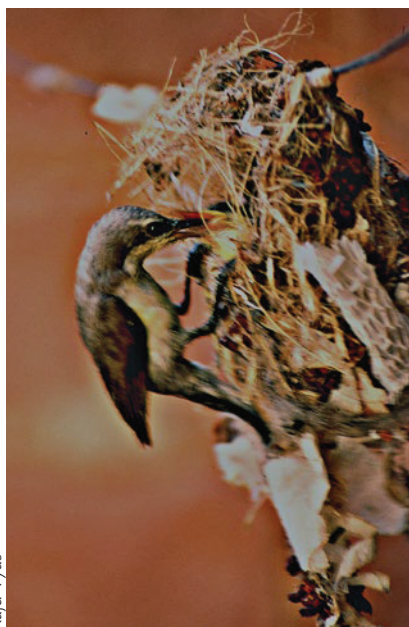
increased. It has been known and observed that the hornbills have increased their distribution and have slowly adapted to urban areas. In most of my sightings, I have observed them on large and tall trees where they may easily and safely make their nest. As now hornbills are frequently appearing in city area, it is our duty to protect and maintain their habitat.

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Purple Sunbird *Nectarinia asiatica* using snake's moult as nesting material

Raju V. Vyas: 1, Shashwat Apartment, Anand Nagar, BPC Haveli Road, Nr. Splatter Studio, Alkapuri, Vadodara 390007. razoovyas@hotmail.com



Raju Vyas

The Purple Sunbird (*Nectarinia asiatica*) is a small, nectar-eating species belonging to the family *Nectariniidae*, and is widely distributed across the Indian subcontinent and Southeast Asia (Ali & Ripley 1983). This is the most common sunbird species in Gujarat (Ganpule 2016) and India too (Grimmett *et al.* 1998). The breeding season of the Purple Sunbird

broods in succession and often uses the same nest for breeding (Mishra 2014). This species constructs the nest as an oblong-shaped purse type pocket, using soft grass twigs, plant fibre, small leaves and bark cobweb. The outer surface of the nest is usually covered with pieces of bark, caterpillar droppings, bits of paper, strings and other rubbish material (George 1958, Tayade *et al.* 2014). A typical nest has a porch-like projection over the entrance hole. This species occurs abundantly in and around human habitation, and as a result, one can find other synthetic materials in a sunbird's nest including polythene shreds, and thermocol junk (Mishra 2014). Use of such synthetic materials due to their lightweight property and easy availability can also be interpreted as an urban adaptation by the species in anthropogenic habitats. The species is known to include many unnatural (man-made) items for nest construction, similar to other common bird species (Khacher 2000, Solanki *et al.* 2018).

varies from place to place, generally coinciding with months when flowering is abundant (Gharidian *et al.* 2008). While breeding, the female Purple Sunbird builds a hanging nest and lays 2 to 3 eggs (Terence 1991). The sunbird rears at least two

In February 2020, a pair of Purple Sunbirds was observed, regularly visiting the backyard garden at my residence in Vadodara, Gujarat. This pair then selected an unused metal

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wire in a relatively undisturbed corner as its nesting site. By the end of February, the pair (male and female) was seen actively constructing an oblong-shaped suspended nest on the wire. Upon closer examination of the nest, I was able to spot a variety of nesting materials, including cobwebs, soft grass twigs, plant fibres, bits of paper and tiny patches of snake moult (See photo). The outer covering of the nest was unusually decorated with such nesting materials.

The nesting habitat influences the nest design and also the material used in making it (Mainwaring *et al.* 2014). Interestingly, how sunbirds select their nest-building material is not well known. However, based on certain studies, the birds choose their nesting material based on the following criteria: (a) structural properties which can bind materials together to form a stable platform (Hansell 2005); (b) structural properties which can function for camouflaging the nest or eggs (Solis & De Lope 1995, Hansell 1996, Schuetz 2005), attracting mates (Brouwer & Komdeur 2004), reducing parasites and bacteria (Lafuma *et al.* 2001, Gwinner & Berger 2005), (c) optimizing the health of the nestlings (Gwinner *et al.* 2000), or a combination of all the above. Some birds also consider the colour of the material as an indicator of its function while preparing the nest (Muth & Healy 2011).

The use of bird feathers as a nest-building material is fairly usual but the use of snake slough is quite rare and remarkable. Snake slough, commonly addressed as snake moults, are not as abundant or easily traceable in the environment, indicating how some birds specifically search to incorporate it as a nest-building material

There is a hypothesis for the use of snake slough as a nest-building material; that it might be an anti-predatory tactic, avoiding predation of eggs and hatchlings inside the nest. Early accounts involving the use of snake slough are merely anecdotal and speculative (Bolles 1890, Strecker 1926, Suthard 1927). None of the prior experimental studies addressed the presumed antipredatory benefit of this particular behaviour, until the study of Medlin & Risch (2006). This hypothesis was first tested and proven, by the experimental use of snake skin / moults as nesting materials to avoiding predation (Medlin & Risch 2006). The use of snakeskin in bird nests is widely cited for few species and was noted in some earlier scientific literature. Strecker (1926) noted the earliest observation of William Winston in 1887, making him the first observer who noticed snakeskin in the nest of a Gray-tailed Cardinal (*Cardinalis cardinalis canicaudus*) being used as nesting material in the city of Waco, Texas, USA. Strecker (1926) listed about fourteen bird species from seven families, which used snake

sloughs as nesting materials. In the context of Indian birds, there are few records of snakeskin being used as nesting materials; by Indian Robin (*Saxicoloides fulicatus*), Bank Myna (*Acridotheres gingianus*) and Common Myna (*Acridotheres tristis*) (Strecker 1926, Dhandukia & Patel 2012). In addition to these, the present study describes the use of snake slough as nesting material in Purple Sunbird.

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Occurrence of Grey-bellied Cuckoo *Cacomantis passerinus* in Vadodara District and its distribution in Central Gujarat

Hiren J. Patel: Sardar Patel Zoological Park, Kevadiya 393151. hirenp9408@gmail.com

Meera B. Makwana: Wildlife Institute of India, Chandrabani, Dehradun 248001, Uttarakhand.

Keyur H. Naria: School of Science, Navrachana University, Vadodara 391410 Gujarat

Kirnalee N. Patel: Wildlife Institute of India, Chandrabani, Dehradun 248001 Uttarakhand

Hitesh M. Ameta: Wildlife Research Laboratory, Department of Zoology, Mohanlal Sukhadia University, Udaipur 313001, Rajasthan.

Geeta S. Padate: Division of Avian Biology, Department of Zoology, Faculty of Science, The Maharaja Sayajirao University of Baroda, Vadodara 390002.



Keyur Naria

Introduction

The Grey-bellied Cuckoo (*Cacomantis passerinus*) is a summer visitor to hills of North Pakistan, and Himalayas; a widespread resident species in Central India, Western and Eastern Ghats; wintering further south in India and Sri Lanka (Kazmierczak 2000; Grimmett *et al.* 2011; Ali 2012, Rasmussen & Anderton 2012). It is a summer visitor in eastern parts of Gujarat (Grimmett *et al.* 2011). Though found in most of Peninsular India, it is not common in drier north-western parts of the country (Payne 2005).

The species has been listed as a ‘Least Concern’ species in The IUCN Red List of Threatened Species owing to its extremely large range and stable population trend (Birdlife International 2016). This fairly common, slim, arboreal bird is found in scrubland and open wooded country, frequently flying to different vantage points and calling from tree tops (Grimmett *et al.* 2011, Ali 2012, Rasmussen & Anderton 2012). The adult male and grey morph female are greyish with white vent and undertail-coverts, while female is distinguishable by barred whitish abdomen and more barred rectrices (Erritzøe *et al.* 2012). The hepatic female is bright rufous above and barred dark-brown with unbarred rufous tail (Grimmett *et al.* 2011, Rasmussen & Anderton 2012, Erritzøe *et al.* 2012). We report here occurrence of this species in Central Gujarat.

Observations

On 17 June 2017, a hepatic female of Grey-bellied Cuckoo was observed in the scrub around Jawla Irrigation Reservoir, north of Vadodara. This being a new species to the area, an extensive search of the species was initiated the following year and literature as well as eBird data for the area were surveyed. Finally, on the morning of 27 May 2018, while birding at Timbi