

## An anecdote of Jacobin Cuckoo parasitizing the Jungle Babbler brood at Bayana, Rajasthan

The Jacobin Cuckoo *Clamator jacobinus* (Boddaert, 1783) also known as Pied Cuckoo, is found in Africa and the Indian subcontinent (Payne & de Juana 2020). In the northern part of the Indian subcontinent, it is a summer visitor ranging from the Indus valley, Pakistan to the west of Assam, India, in the east. The species is known to reside and breed in the Indian subcontinent during early June to October while the migratory population winters in Africa (Gaston 1976; Ali & Ripley 1983; Nahid et al. 2016). The species is also a resident in the southern part of India (Rasmussen & Anderton 2012). The Jacobin Cuckoo has a long list of hosts, though the well-known and confirmed host species are Jungle Babbler *Argya striata*, Yellow-billed Babbler *Argya affinis*, Common Babbler *Argya caudate*, Large Grey Babbler *Argya malcolmi*, Rufous Babbler *Argya subrufa*, and Streaked Laughingthrush *Trochalopteron lineatum* (Praveen & Lowther 2020). At Bayana, Bharatpur District of Rajasthan, our



Fledgling of Jacobin Cuckoo at Bayana, Bharatpur District. © Sachin Ranade.



The fledgling of Jacobin Cuckoo fed by Jungle Babbler. © Sachin Ranade.

field station was located in a rented house that was surrounded by mosaic of crop-fields and congested settlements (26.91°N 77.29°E). On 04 October 2003, in the evening, a flock of 8–10 Jungle Babblers *Turdoides striata* was seen in the garden. The flock members descended one by one, close to me, on the ground. While descending, the flutter and chirruping calls

of the first five individuals was same but the last one appeared a bit different. It was the fledgling of Jacobin Cuckoo following the flock and producing similar call as that of its foster parents. The flock had two fledglings of the host species as well, but the cuckoo young one was grabbing all the attention and was fed more frequently than the Jungle Babbler fledglings. The ability of the Jacobin

Cuckoo's nestling and fledgling to mimic the call of its hosts is documented in case of Yellow-billed Babbler *Turdoides affinis* and Southern Pied Babbler *T. bicolor* (Jamie & de Silva 2014) and in the Common Fiscal *Lanius collaris* (Liversidge 1969). Nestling mimicry in brood parasitic bird species serves to avoid rejection altering parental provisioning and competing with host nest-mates (Jamie & Kilner 2017). A detailed study on *Vidula* species in Zambia has recorded qualitative and quantitative evidences of mimicry in case of the 'mouth marking pattern and colour, begging calls, and postural displays' by the parasitic nestling (Jamie et al. 2020). The co-evolution of acoustical communication between obligate avian brood parasites and their hosts has been well reviewed (Wang et al. 2020).

As the fledgling was found in October, it could be the third brood of the Jungle Babblers for that year as stated by Gaston in 1976. In the 'abundance animation' for the breeding phase of this species by eBird, northwestern India becomes the hotspot during June–August and the population recedes from northern India after November (Fink et al. 2020). As the fledgling was observed in first week of October, it would be interesting to know how quickly the young bird started its migration to Africa.

This brief description with photographic record is an additional site record for the species. The mimicry of the call of Jungle Babbler by the fledgling of Jacobin Cuckoo appears an additional information to science, related to behavioural patterns of the birds for survival.

## References

- Ali, S. & S.D. Ripley (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. Pp. i–xlii, 1 l., pp. 1–737, 56 ll.
- Fink, D., T. Auer, A. Johnston, M. Strimas-Mackey, O. Robinson, S. Ligocki, W. Hochachka, C. Wood, I. Davies, M. Iliff & L. Seitz (2020).** eBird Status and Trends, Data Version: 2019; Released: 2020. Cornell Lab of Ornithology, Ithaca, New York. <https://doi.org/10.2173/ebirdst.2019>. Accessed on 20 May 2021.
- Gaston, A.J. (1976).** Brood Parasitism by the Pied Crested Cuckoo *Clamator jacobinus*. *The Journal of Animal Ecology* 45(2): 331–348. <http://www.jstor.org/stable/3878>
- Jamie, G.A. & G. de Silva Wijeyeratne (2014).** Similarity of the calls of juvenile Pied Cuckoo *Clamator jacobinus* and its Sri Lankan host species, Yellow-billed Babbler *Turdoides affinis*. *Forktail* 30: 133–134.
- Jamie, G.A. & R.M. Kilner (2017).** Begging Call Mimicry by Brood Parasite Nestlings: Adaptation, Manipulation and Development pp 517–538. In: Soler, M. (edt) *Avian Brood Parasitism: Behaviour, Ecology, Evolution and Coevolution*. Springer Publishing Company, Cham, 574 pp.
- Jamie, G.A., S.M. Van Belleghem, B.G. Hogan, S. Hamama, C. Moya, J. Troscianko, M.C. Stoddard, R.M. Kilner & C.N. Spottiswoode (2020).** Multimodal mimicry of hosts in a radiation of parasitic finches. *Evolution* 74(11): 2526–2538.
- Liversidge, R. (1969).** The biology of the Jacobin Cuckoo *Clamator jacobinus*. *Ostrich Suppl.* 8: 117–137.
- Nahid, M.I., S. Begum & M.M. Feeroz (2016).** Brood parasitic cuckoos and their hosts in Jahangirnagar University campus. *Indian BIRDS* 12(2&3): 64–69.
- Payne, R.B. & E. de Juana (2020).** Pied Cuckoo *Clamator jacobinus*, version 1.0. In *Birds of the World* (J. del Hoyo, A. Elliott, J. Sargatal, D.A. Christie, and E. de Juana, Editors). Cornell Lab of Ornithology, Ithaca, NY, USA. <https://doi.org/10.2173/bow.piecuc1.01>. Accessed on 20 May 2021.
- Praveen, J. & P. Lowther (2020).** Avian brood parasitism in South Asia. *Indian BIRDS* 16(4): 103–119.
- Rasmussen, P.C. & J.C. Anderton (2012).** *Birds of South Asia: the Ripley Guide: Attributes and Status - 2*. Smithsonian Institution and Lynx Edicions, Washington, D.C. and Barcelona, 683pp.
- Wang, J., Q. Li & C. Yang (2020).** Coevolution of acoustical communication between obligate avian brood parasites and their hosts. *Avian Research* 11: 43. <https://doi.org/10.1186/s40657-020-00229-2>

**Acknowledgements:** I would like to thank the late Mr. Subhash Goyal, the house owner in Bayana and the Bombay Natural History Society for the constant support.

## Sachin Ranade

Vulture Conservation Breeding Center, Rani, Kamrup District, Assam 781131, India.  
Email: s.ranade@bnhs.org

**Citation:** Ranade, S. (2021). An anecdote of Jacobin Cuckoo parasitizing the Jungle Babbler brood at Bayana, Rajasthan. *Bird-o-soar* #95, In: *Zoo's Print* 36(7): 28–29.