

Subsequent visits to the same area during the Second Uttarakhand Spring Bird Festival, from 05 to 08 February 2014, did not result in any sightings of this species. It remains unclear, and the subject of further research, whether the sighting of this species was that of a vagrant, or whether the species has been overlooked in this landscape. This bird is likely to have originated from the Nepal population, treated as *conoveri*, rather than the more easterly *phayrei*. If Rasmussen & Anderton's (2012) treatment of the species is accepted, both these races will be treated under a single species, and this record will have to be treated as of 'Ashy-headed' Green Pigeon.

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Interaction between a Jungle Crow *Corvus culminatus* and a Malabar Pied Hornbill *Anthracoceros coronatus*

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On 22 November 2012, while on a visit to the Dandeli Wildlife Sanctuary in Uttara Kannada District (Karnataka, India), we set out to visit the government timber depot, located close to the city. At the depot, we stopped at a fruiting *Ficus drupacea* tree, and found that Malabar Pied Hornbills *Anthracoceros coronatus* were visiting the tree to feed on the ripe yellow figs. The area was filled with the characteristic raucous cackling of the noisy flocks (Ali 2002). After feeding, some of them flew from the *Ficus drupacea* tree to another leafless tree close by, rested for a while, preened, and flew away.

At about 0720 hrs, one hornbill was seen resting on a 09 m high branch of the bare tree. It preened for a while. A few minutes later, a Jungle Crow *Corvus culminatus* flew onto the same branch, and tore out a chunk of bark from the lower section of the branch. Holding this piece of bark in its beak [35], the crow flew onto the same branch where the hornbill was perched, and moved closer to it, seeming as though it was trying to present the piece of bark to the hornbill. At this, the hornbill opened its beak wide, and tried to scare the crow away, but the crow returned

with the bark twice, again eliciting the same response from the hornbill. After being snapped by the hornbill the third time, the crow dropped the piece of bark, while it tried to get a proper grip on it.

After this, the crow returned once more, but this time, it broke a small twig from the base of the branch of the bare tree [36] and moved closer to the hornbill with the twig held in its beak. Before it came close to the hornbill, it appeared to eat the twig. Our initial thought was that it had broken the twig to add it to a nest, but November was not its breeding season (Ali & Ripley 2001). Thus, the fact that the crow broke a twig, and apparently ate it (see Gadadhar & Belur 2013; clip between 01:47 and 01:56), seemed rather unusual.

The crow then perched close to the hornbill. It opened its beak a couple of times, and it seemed as though it was calling. A few moments later, another Jungle Crow came onto the same branch. The first crow showed aggression towards the latter ("jumped up and 'fought' with the second crow", in our notes), and chased it away [37]. It then returned to the same branch on



35. Jungle Crow carrying a piece of bark in its beak, and moving closer to the Malabar Pied Hornbill.



38. Jungle Crow flying away.



36. Jungle Crow moving closer to the hornbill with a twig in its beak.

which the hornbill was perched.

The crow repeatedly tried to get closer to the hornbill, only to be snapped-at, and chased away. On a few occasions, the crow was within a few centimeters from the hornbill. The hornbill looked quite annoyed at the crow's behavior, and having failed to drive away the crow, the hornbill finally dropped to a lower branch. The crow followed the hornbill, and went close to it, only to get snapped-at again. After another attempt to get close to the hornbill, the crow flew away [38]. After a short while, the hornbill preened again and flew away. The entire incident lasted for about ten minutes, and was captured on video (Gadadhar & Belur 2013).

Our original impression was that the crow was trying to entice the hornbill with a piece of bark, and the twig. However, after discussions with other birdwatchers we wondered if the crow



Photos:

37. Fighting Jungle Crows.

was probably 'harassing' or 'mobbing' the hornbill (Gadgil 2001). Crows are known to mob or disturb large owls, birds of prey, bonnet macaques, or even snakes (Neelakantan 1963; Editor 1975; Sivakumar & Prakash 2005). Crows are usually known to do this when there is food involved, to steal food from the other bird or animal (Koirala & Giri 1996; RSPB 2013). However, the hornbill didn't have any food with it. Jungle Crows have also been observed stealing non-food items like golf balls (Poché 1981), and even spectacle frames (Aitken 1900).

In the present incident there was no food involved, and thus it leads us to believe that the crow may not have tried to harass the hornbill, even though it repeatedly tried to get closer to the hornbill, with the piece of bark, and the twig. This unusual behavior of the crow seems to indicate that it was trying to play pranks with the hornbill (Poché 1981; Ali & Ripley 2001).

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