Nest poaching of Malabar Grey Hornbill *Ocyceros griseus* in a shaded coffee plantation in Wayanad, Kerala, India

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Hornbills are among the most important seed dispersers in tropical forests (Corlett, 2017) and are well known for their unique nesting behaviour. They choose secondary cavities in trees for nesting and the female seals the cavity from the inside, leaving only a narrow slit through which the male provides food throughout the nesting period (Datta *et al.*, 2018; Patel *et al.*, 2022). Many hornbills exhibit strong nest site fidelity, reusing the same cavity across multiple breeding seasons. While their specialised nesting behaviour offers protection from natural predators, it also increases their susceptibility to poaching (Kinnaird and O'Brien, 2007; Poonswad *et al.*, 2013). There have been various reports on the hunting and poaching of different

Image 1: A section of the plantation with the nest tree at the center. Photo: Sujanan MK

Image 2: Chiseled-open nest cavity. Photo: Ahirbudhnyan M

Image 3: Footholds cut into the tree trunk to reach the nest cavity. Photo: Ahirbudhnyan M

species of hornbills found in India (Dasgupta and Hilaluddin, 2012; Naniwadekar and Datta, 2013; Naniwadekar *et al.*, 2015). Here we provide the first report describing a case of poaching of the Malabar Grey Hornbill (*Ocyceros griseus*). This species, endemic to the Western Ghats, is listed as Vulnerable on the IUCN Red List, with the identified threats being habitat loss and fragmentation (IUCN, 2020).

During a field survey for Malabar Grey Hornbill nests in April 2025 in Wayanad district, Kerala, India, we recorded an incident of nest poaching of Malabar Grey Hornbill. The event occurred in a privately owned plantation at an altitude of 797 m asl near the Begur Forest Range of Wayanad Wildlife Sanctuary, Kerala. The plantation, which was formerly a shaded coffee, with surrounding vegetation majorly consisting of moist deciduous forest and teak (*Tectona grandis*) plantations, was being cleared for ginger cultivation (Image 1).

An active nest was recorded on 20th March, 2025, during the early breeding season in a live, Silver Oak (*Grevillea robusta*) tree with a height of 19.1 m and a Girth at breast height (GBH) of 240 cm. This nest had not been documented in the previous breeding season by the survey team. The nest cavity was located 5.7 m above the ground. Photographs and videos shared by the local residents confirmed the presence of the sealed-in female being provisioned by the male. The nest tree was situated near human

Image 4: Carcasses of the chicks beneath the nest tree. Photo: Ahirbudhnyan M

habitation, approximately 80 m from the nearest settlement.

On the morning following a confirmed provisioning event, the cavity was found forcefully opened using sharp tools, like an axe or machete, as evidenced by deep cuts on the trunk (Image 2), including foothold cuts that aided poacher/s to reach the level of the nest cavity (Image 3). Wood chips were scattered at the base. The female was missing, and two dead chicks were found discarded at the base of the tree (Image 4). The chicks were at an advanced developmental stage, showing emerging pin-feathers and early feather growth on their wings, indicating that they were not hatchlings, but not yet fully feathered or capable of fledging. Additionally, the branches of the nest tree and the adjacent trees were pruned. The lower vegetation was cleared and burned in preparation for the next cultivation.

We also got multiple verbal accounts indicating opportunistic collection of hornbill eggs and adults from the nest cavities outside the protected areas of the Wayanad district, further confirming that this was not an isolated incident. These observations highlight the species' vulnerability outside protected areas, particularly in human-dominated landscapes.

We recommend mapping, targeted awareness programs, and systematic monitoring of hornbill nests outside protected areas, including private plantations. Currently, there is no landscape-specific action plan for hornbill conservation in the Western Ghats; however, developing and implementing such a plan covering both protected and non-protected landscapes would provide an integrated framework to ensure the long-term survival of hornbills. Furthermore, the Tamil Nadu Forest Department has recently launched a Hornbill Conservation Initiative which includes the establishment of a Centre of Excellence for Hornbill Conservation. This program seeks to protect hornbill nesting trees located on private lands by recognizing landowners as "Tree Guardians" and "Hornbill Protectors" to

incentivize stewardship. Such measures provide a noteworthy example, and adopting comparable approaches in Kerala could strengthen conservation outcomes, particularly in landscapes where hornbill nesting occurs in private lands or plantations.

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