

Recent seizures of hornbills trafficked to India

Chris R. Shepherd^{1,2,*}, Loretta Shepherd¹, Devika Rathore³ and Uttara Mendiratta³

¹Monitor Conservation Research Society, Big Lake Ranch, B.C., Canada

²IUCN SSC Hornbill Specialist Group

³Wildlife Conservation Society–INDIA, 551, 7th Main Road, Rajiv Gandhi Nagar, 2nd Phase, Kodigehalli, Bengaluru 560 097, Karnataka, India

***Corresponding author:** Chris Shepherd (chris.shepherd@mcrsociety.org)

Background

There are 62 species of hornbills in the world, found across much of Asia and Africa. These large birds play an important role in the ecosystems they inhabit, primarily as dispersers of large seeds (Kinnaird and O'Brien, 2007; Poonswad et al., 2013). Generally, these species require vast areas and are often found in relatively low densities, though some species congregate in large groups. Hornbills are threatened by habitat loss and increasingly by the illegal wildlife trade where they are in demand for their parts used in traditional medicines, for consumption and for ornamental purposes, and live as pets (Kinnaird and O'Brien, 2007; Nijman and Shepherd, 2015; Beastall et al., 2016). Forty percent of the world's hornbill species (26 of the 62 species) are Globally Threatened or Near Threatened with extinction (<https://iucnhornbills.org/background/>).

Relatively little is known about the scale of the trade in hornbills as pets. As a number of hornbill species are listed in the appendices of the Convention on International Trade in Wild Fauna and Flora (CITES), the agreement that regulates the international trade of wildlife and wildlife products, records of international trade for some species exist, but not all. Fur-

thermore, there is very little data available on illegal international trade.

Recently, India has become a major destination for illegal shipments of wildlife from around the globe. The booming demand for exotic species there appears to be escalating over the past few years and involves a wide range of species from different continents, including the Red Kangaroo, orangutan, gibbons, Two-toed Sloth, Black Crested Macaque, marmosets, tamarins, macaws, turtles and more, as reported in the media. In this list are several species of hornbills. As little information exists regarding the illegal international trade in hornbills, we feel such information should be published and made available to those concerned with the conservation of these species, and for those working to prevent illegal wildlife trade. Here we present records of recent seizures of hornbills seized from traffickers entering India.

Methods

We have collected seizure data from the border states (Mizoram, Tripura and Meghalaya) in north-east India (bordering Myanmar and



Photos of seized hornbills. Source: Mizoram Police, retrieved from www.traffic.com; West Jaintia Police, retrieved from The Meghalayan Bureau and East Mojo.

Bangladesh) from January 2022 to April 2023. Information was collected from open media. Often the species were not identified, or inaccurately identified, and as such we have done our best to confirm the identification of all records we obtained and therefore our reporting here varies slightly from the species and numbers reported in the media.

We discuss the origins of these species, the conservation status of each according to the *IUCN Red List of Threatened Species* (hereafter the *IUCN Red List*), and the status of each species under CITES. We discuss legislation in India that has been used to seize these birds, and the penalties received by traffickers involved. Finally, we make recommendations for further actions to tackle the trafficking and illegal buying of hornbills in India.

Results

From January 2022 to April 2023, 19 non-native hornbills of five species were seized in four separate incidents. All five species seized are native to Southeast Asia, with four of the five species being endemic species to single countries—one to Indonesia and three to the Philippines (Table 1). All five species are listed in Appendix II of CITES, and India as well as all the range countries of these five species are party to CITES. None of the shipments were accompanied by any required CITES documentation. Three species are assessed as Vulnerable, one Near Threatened and one Least Concern by the IUCN Red List of Threatened Species. In Indonesia, all the country's native species are protected under national legislation.

Table 1. Hornbill species seized in India from January 2022 to April 2023, volumes, native range, IUCN Red List status, CITES status and protection status in India.

Species	Number	IUCN Red List	CITES Appendix	Native to
Rhinoceros Hornbill <i>Buceros rhinoceros</i>	8	VU	II	Thailand, Malaysia, Brunei, Indonesia
Knobbed Hornbill* <i>Rhyticeros cassidix</i>	2	VU	II	Indonesia
Writhed Hornbill* <i>Rhabdotorrhinus leucocephalus</i>	2	NT	II	The Philippines
Mindanao Hornbill* <i>Penelopides affinis</i>	3	LC	II	The Philippines
Southern Rufous Hornbill* <i>Buceros hydrocorax mindanensis</i>	4	VU	II	The Philippines
Total number seized			19	

*endemic to a single country

All four seizures took place near international land borders and in most incidents, species other than hornbills were also seized (Table 2). Arrests were made in each case.

Discussion and Recommendations

India is increasingly the destination and transit country for a wide variety of wildlife smuggled into the country from around the world, including Southeast Asia. A commonly used trafficking route through sea and land borders is Indonesia – Peninsular Malaysia – Thailand – Myanmar – Mizoram (India). These are highly porous borders with large volumes of trade operating across them, including illegal trade in contrabands. Seizures in the past year have been made up of odd combinations of birds, mam-

mals and reptiles from different continents. On four occasions Southeast Asian hornbills have been among these bizarre assortments of trafficked wildlife.

As the species in these shipments have been shipped live and are not species seen in trade for meat or medicines, it is most likely the animals were intended to be sold as pets. However, given the volumes and the strange array of species, it is very likely at least some of these species were destined for animal collections or possibly zoos.

These seizures came at a time when India was in the process of including CITES species within the Wildlife (Protection) Act of 1972 through an amendment. The hornbills seized above are

Table 2. Locations and dates of seizures

Date	Location	Details	Media source
6 August 2022	West Jaintia Hills, Meghalaya	1 Rhinoceros Hornbill seized along with 5 primates and 1 otter from a vehicle coming from Mizoram, allegedly bound for Guwahati.	https://themeghalayan.com/exotic-wildlife-species-rescued-two-held/
8 August 2022	West Jaintia Hills, Meghalaya	2 Knobbed Hornbills, 5 Rhinoceros Hornbills and 1 Wriathed Hornbill seized from a vehicle from Mizoram allegedly bound for Guwahati.	https://www.instagram.com/p/ChM18XWvGc8/?utm_source=ig_web_copy_link&igshid=MzRIODBiNWFIZA==
13 August 2022	Tripura	2 Rhinoceros Hornbills seized in a shipment of 300 reptiles and other birds allegedly bound for Agartala.	https://www.instagram.com/p/ChM18XWvGc8/?utm_source=ig_web_copy_link&igshid=MzRIODBiNWFIZA==
6 March 2023	Mizoram	3 Mindanao Hornbills, 4 Southern Rufous Hornbills and 1 Wriathed Hornbill seized along with 5 birds and 4 primates from a vehicle heading for Guwahati.	https://www.hindustantimes.com/cities/others/17-exotic-wildlife-species-smuggled-through-myanmar-rescued-in-mizoram-police-101678246043579.html

listed under Appendix II of CITES. Therefore, as per the Wild Life (Protection) Act, 1972 as amended by The Wild Life (Protection) Amendment Act, 2022, the sections violated were Section 49-H, Section 49-J and Section 49-M, which restricts international trade in scheduled specimen and restrictions there of, violation of conditions for import of scheduled specimen and violation of possession, and transfer of living scheduled animal species, respectively. Furthermore, these do not adhere to the rules mentioned in the Wild Life (Protection) Act, 1972. These violations may be penalized with imprisonment up to 3 years or fine of up to INR 1 lakh (approximately \$1200) or both under the penal section 51 of Wild Life (Protection) Act,

1972.

The recent increase of trafficking in hornbills and other wildlife exotic to India is of concern and the drivers of this phenomenon should be investigated. Resulting data of such an investigation should be analysed and provided to enforcement agencies to aid in developing strategic responses to the trafficking. The routes used by the traffickers also need to be identified and monitored to improve prevention strategies. Globally, hornbills are declining due to habitat loss, hunting and illegal wildlife trade. The demand for hornbills as pets is of concern as this demand will drive further poaching and support criminal networks. We

strongly recommend that authorities in India communicate with the source countries and develop mechanisms in which joint enforcement efforts can be initiated to tackle this international crime. As there is no official policy on the placement, disposal or repatriation of confiscated wildlife in India other than those recommended by CITES, we recommend that an action plan or set of policies be developed to deal with the fate of confiscated hornbills in the future. We recommend systematic monitoring by NGOs and the Government of the trade in non-native wildlife to India be initiated and that all seizure and prosecution data be collected and published to aid in developing strategies and policies to counter the trafficking and the resulting negative conservation impacts. We suggest a system be put in place to assist authorities and media in correctly identifying the species seized and that efforts be made to repatriate seized wildlife, if the origin is known, as soon as possible.

Acknowledgements

We thank Simon Bruslund for assisting in identifying the hornbills included in these seizures and Anirban Chaudhuri for his contribution to this note, espe-

cially his inputs on the legislation surrounding hornbill trafficking in India. We would also like to thank Dwi Adhiasto, Jessica Lee and Rohit Naniwadekar for their helpful comments.

References

- Beastall C, Shepherd CR, et al. 2016. Trade in the Helmeted Hornbill *Rhinoplax vigil*: the 'ivory hornbill'. *Bird Conservation International* 26: 137-146. Available on CJO2016. [doi:10.1017/S0959270916000010](https://doi.org/10.1017/S0959270916000010).
- Kinnaird MF and O'Brien TM. 2007. *The Ecology and Conservation of Asian Hornbills: Farmers of the Forest*. University of Chicago Press, Chicago.
- Nijman V and Shepherd CR. 2015. Trade of 'captive-bred' birds from the Solomon Islands: a closer look at the global trade in hornbills. *Malayan Nature Journal* 67: 260–266.
- Poonswad P, Chimchome V, et al. 2013. *Conservation of hornbills in Thailand in Conservation Biology: Voices from tropics*. Eds. Raven, PH, Sodhi, NS and Gibson, L. pp. 157–66. <https://doi.org/10.1002/9781118679838.ch19>.



Chris R. Shepherd



Loretta Shepherd



Devika Rathore



Uttara Mendiratta