

Hornbill news

Red List status of hornbill species: ensuring updated species factsheets and review of threat assessments

Twenty-four of the 62 hornbill species are currently threatened. Many species are due for a review of their threats status listing based on more recent or better data/knowledge. The existing factsheets often lack adequate or updated information on the species.

One of the tasks of the IUCN SSC Hornbill Specialist Group (HSG) is to ensure a thorough and informed assessment of the status (threat category) of all hornbill species along with making sure all factsheets are up to date and more comprehensive. While the primary aim of the Red Listing process is determining the threat status, it is also important that the factsheets up on the IUCN Red List website (that are referred to by people all over the world) also has more accurate, updated, detailed information on the hornbill species.

BirdLife International (official authority for all bird assessments) is working with the HSG to make sure the assessments are ready for the November 2020 IUCN update.

This project was carried out with the help of two interns working with Dr. Aparajita Datta and Dr. Lucy Kemp (HSG co-chairs) with funding support from Chester Zoo.

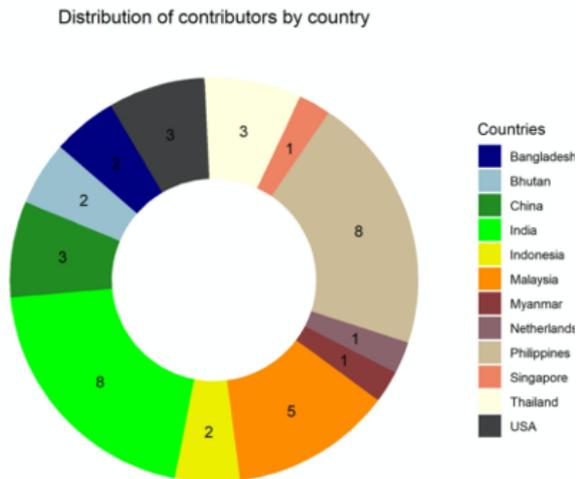
The process followed was different for the Asian and African hornbills as there is much more information and data available for most Asian species. The key priorities for the Asian hornbills was to

update and improve the existing factsheets and re-assess the threat categories for some species where new data/information suggested that a change was needed. This had to be done within the deadline set by BirdLife for receiving these inputs so that these changes could be incorporated in the November 2020 assessment. For the African hornbills, for which there is much less collated information available, the process followed was to conduct a thorough literature and desktop review and to re-evaluate the current threat categories.

Asian hornbills

Ishaan Patil and Aparajita Datta

We report on the steps/process followed for Asian hornbills. The first step was to reach out to various experts (part of the HSG or otherwise) and ask them to go through the existing latest version of the species factsheet (shared by BirdLife) and make additions/edits to it based on their knowledge/data. Sixty-three experts from 15 different countries who had worked on either one or more Asian hornbill species were contacted via email. We received inputs from 37 experts including ex-situ data from North American and European zoos from 2 HSG members. All 32 Asian hornbill factsheets were updated and on an average each factsheet was reviewed by 5 individuals (range 0 – 18). Individuals from the Philippines, Indonesia, USA, Netherlands, Bangladesh, Bhutan, Myanmar, China, Thailand, Malaysia, Singapore and



India contributed to the assessment.

Four species (Sri Lankan Grey hornbill, Tickell's Brown hornbill, Mindoro Tarictic hornbill and Mindanao Tarictic hornbill) did not receive inputs despite several requests, so they were updated by us by referring to available literature.

Four species were suggested for a threat level update. The Austen's Brown hornbill or White-throated Brown hornbill *Anorrhinus austeni* was suggested to be moved from Near threatened to Vulnerable. The suggested uplisting for the Austen's Brown hornbill could not be considered by BirdLife as the inputs for the species were made at a later date and will be considered in the future.

The Sumba hornbill *Rhyticeros everetti* was proposed to be moved from Vulnerable to Endangered. The Malabar Grey hornbill *Ocyrceros griseus* was suggested to be uplisted to Vulnerable from Least Concern. The Narcondam hornbill *Aceros narcondami* was also proposed for a review of its status given new data on its population suggesting that it could be downlisted from Endangered to Vulnerable under certain criteria.

BirdLife had also earlier suggested uplisting of the Tickell's Brown hornbill from Near Threatened to Vulnerable but it had been kept on hold due to lack of current data on populations within its range. Since there was no new information available on population status in the 2 range countries, the threat category of this species remains unchanged pending more current data.

The revised factsheets for all 32 Asian species were shared as and when they were completed from February to May 2020. BirdLife put up the topics with assessments for the species based on new information available with the suggested category changes on the Global bird forum in May for public inputs and comments. The topics were open till 28 June for comments. Preliminary decisions were taken based on all inputs received. The decisions are to be found as comments at the bottom of each relevant topic, with all topics here: <https://globally-threatened-bird-forums.birdlife.org/>. The topics were re-opened for any further comments until 19th July 2020, when topics are closed and final decisions to be submitted to IUCN will be made by BirdLife.

The project was carried out from December 2019 to May 2020. Although we tried to do the assessment as extensively as possible, there are some species which have not been thoroughly reviewed. We are also lacking data on some species from some range countries like Sri Lanka, Myanmar, Vietnam, Cambodia and Laos. The next update and assessment will have to be more extensive than this one. For accurate threat level assessment, we will require greater participation from hornbill researchers/scientists working in all range countries. This update is just a beginning. A more extensive update/desktop review will be carried out by compiling information based on certain criteria/parameters that would be listed on a database format.

African hornbills

Lucy Kemp and Kath Forsmann

Thanks to funding from Chester Zoo, Dr Kathryn Gamble and Milwaukee County Zoo, we could hire a full-time intern, Dr Katherine Forsmann, to collate all information available about all of the African hornbill species. Currently, none of Africa's hornbill species are listed on any of the CITES appendices despite evidence of concerning declines of certain species numbers across the continent. Designating research efforts and funds is made particularly difficult due to a lack of data and information on many species. To properly understand the conservation status and needs of these species a complete reassessment of the IUCN status of Africa's hornbills was needed. We aimed to reassess all species under the IUCN Hornbill Specialist Group banner to make informed future decisions regarding research and conservation. The reassessments were conducted through intensive online literature research. All records of sightings, calls, evidence of each species, databases and local reports were recorded in a pre-constructed species matrix. These data were collated to determine which species' status should be updated and, where the conclusion was that the status is 'Data Deficient' future efforts will focus on local, on site research into assessing these species in more detail. The ultimate goal is to establish protocols for studying and monitoring hornbills in the wild that will enable accurate abundance estimates, nest and roost monitoring, breeding biology, diet and behavioural studies and seed dispersal and restoration behaviour and to produce a reliable current handbook that can be used by biologists, students and local communities alike.

A species matrix for all African hornbills (including new taxonomic split) was constructed as follows:

For each and every available data point (published literature, sighting, audio recording, track or sign, historic record) the following was

be recorded:

- Species
- Record date
- Location details – country, province/district/state
- Coverage – global, regional, national or site specific
- Record category – breeding ecology, feeding ecology, distribution and population, movement and home range, fragmentation, research method, habitat, seed dispersal, ecotourism, genetic, ethno-ornithology, threats, use and trades, ongoing conservation action or captive breeding and husbandry
- Record source – scientific journal, thesis or dissertation, popular article, sighting or personal communication
- Record details (for all except sighting) – authors, publication name, publisher, year, volume, edition, pages

With this we were able to assess each species to inform a reassessment of IUCN conservation statuses. These data were collated to identify the species that had enough data to be accurately assessed and whether their current IUCN listings were correct, which species should be changed from Least Concern to Data Deficient, where (which species) attention should be focused in the short-term and where, both nationally and regionally, future funds should be directed for implementation of conservation training, capacity building and community engagement.

We succeeded in constructing a complete matrix for all African hornbill species (except *Bucorvus leadbeateri* which was recently re-evaluated and is considered **Vulnerable** internationally throughout their sub-equatorial range in Africa and *Endangered* in South Africa and Namibia). Based on the literature, sightings, audio recordings, tracks or signs and historic records that we collated, we

were able to re-assess 32 African hornbill species. We have recommended that 27 of these be re-classified as **Data Deficient**. These recommendations were based on a severe lack of data on so many species as well as a lack of recent (within the last 10 years) literature. The updated IUCN

factsheets are currently with the relevant specialists for review and final revisions will be submitted to BirdLife International for their appraisal for the next assessment. By then we hope to have all the relevant data available to support any queries regarding the change in IUCN Red Listing.



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