

Helmeted Hornbill Working Group (HHWG) 2019-20 update

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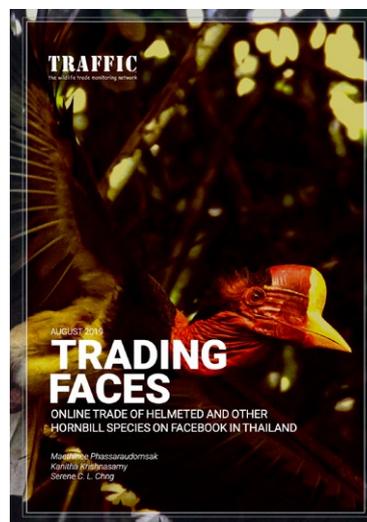
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This update was prepared with inputs from IUCN SSC Hornbill Specialist Group and HHWG sub-group leads and members. The [Helmeted Hornbill \(*Rhinoplax vigil*\): Status Review, Range-Wide Conservation Strategy And Action Plan \(2018 – 2027\)](#) identified three goals to tackle the trade, but also the conservation of the species – these are linked to specific objectives (and actions). This document will report on the various updates under each objective. This report has also been shared with CITES for their information and action.



1. Recent Notable Trade Reports

1.1 Thai Hornbill Trade

TRAFFIC launched a report on the online trade in Thailand in August 2019

(<https://www.traffic.org/publications/reports/hornbills-losing-their-heads-to-online-trade-in-thailand/>).

The six-month online survey found a minimum of 236 online posts offering a minimum of 546 hornbill parts and products in 32 of the 40 groups surveyed on Facebook. These were posted over a period of 64 months, spanning June 2014 to April 2019. Helmeted Hornbill parts and products constituted 452 (83%) of all hornbill commodities recorded. 94 whole heads of eight other hornbill species—all native to and protected in Thailand—made up the rest of the hornbill commodities recorded in the survey.

1.2 Golden Triangle and Greater Mekong area Physical Market Surveys by TRAFFIC

Two physical market surveys were carried out. The first survey was from May to July 2019 across 11 locations in three countries – Lao PDR, Myanmar and Thailand, while the second survey was from September to December 2019 across 29 locations in four countries – Lao PDR, Myanmar, Cambodia and Thailand. The results are summarized in the table.

1.3 Mainland China HH Surveys – Physical and Online Surveys by TRAFFIC

Physical market surveys of HH products in mainland China took place across four years from 2016-2019. The results of the survey are presented in the table.

Results of Golden Triangle and Greater Mekong area Physical Market Surveys

Taxa/item type	Survey 1	Survey 2
Type of Helmeted Hornbill products	Bracelet (1) and necklace (1)	Bracelet (3) and necklace (1).
Locations found	Luang Prabang	Luang Prabang and Vientiane
Pricing info	CNY 3,000 each	LAK 800,000 (bracelet) THB 40,000 – THB 42,000 (bracelet) THB 58,000 (necklace)

Online market surveys in mainland China, however, showed that almost no dealers sold HH products through traditional websites. Instead, HH product dealers mainly use social media platforms such as Wechat, Tieba, etc. which are more covert than websites. The current average price of HH was recorded to be ~ CNY 150/g.

1.4 Online & Antique Shops Survey in Hong Kong SAR (HK)

Online market survey of HH products in the HK by the University of Hong Kong (HKU) comprised a one-off survey in Dec 2019 Jan 2020 (8h/day across four days). It was focused on HK and mainland China traders. The survey recorded eight HH items sold over WeChat or Facebook:

- Beaded bracelet x 1
- Beaded necklace x 1
- Pendant + beaded necklace x 2
- Carved figurine (small) x 3
- Uncarved bill x 1
- A lot of fake products were identified, with some of high quality

Results of Mainland China HH Surveys

Year	Cities visited	Outlets selling HH	HH products (pieces) found in market
2016	7	32	138
2017	10	51	110
2018	11	43	82
2019	10	26	56

1.5 Combating Illegal Wildlife Trade in Sarawak – Sarawak Forestry Cooperation (SFC), Malaysia

As the state government department for the protection of wildlife, the SFC actively carries out a range of activities with regards to tackling the illegal wildlife trade. These include monitoring illusive wildlife trade in the town areas, illegal wildlife trade across border, wildlife cybercrime and bio-piracy. The SFC applies a four-pronged approach in their intervention: Monitoring (e.g. urban area and cyber patrols, border patrols), Enforcement (e.g. market areas, clubs, national/international operations), Awareness (e.g. Conservation Education Public Awareness CEPA, volunteer wildlife ranger programs with NGOs, engaging local councils) and Publicity (e.g. signages, brochures and radio programs). The SFC has also undertaken joint SMART patrols with the Royal Malaysia Police and Wildlife Conservation Society. In October 2019, an arrest of a trader and confiscation of 148 pieces of HH parts was carried out. The estimated local market value of the casques was RM296,000.00 or close to USD70,000.

The SFC have plans to review laws, regulations and standard operating procedures, as well as intensifying enforcement at state/national/international levels, but to also work with relevant partners on demand reduction and capacity building initiatives.

as victims of crime. These statements establish the impact of wildlife crimes and can be utilised by prosecutors in their presentation of cases at court. Armed with knowledge of the role of animals as individuals and species victims of crime, sentences may be passed that take appropriate regard of wild animal suffering, their monetary and conservation value, and the impact of their loss on biodiversity. The use of these statements is allowing for better-informed sentencing decisions in individual cases and improved environmental justice. They are based on information around:

- IUCN Red List category
- Ecosystem impact through exploitation
- Population depletion and food chain effects
- Current monetary value on the black market
- Welfare concerns in transport
- Invasive species, disease and pathogen concerns
- Forensic information and analyses

Two Case Studies applying VIS for CITES Appendix I species:

In May 2018, an amendment in HK legislation was made which raised the maximum penalty for importing Appendix I species to 10 years imprisonment. Five rhinoceros horn cases have since been prosecuted in the District Court (previously they were always tried in the inferior magistrates' courts). In each case, the defendant smuggled between 1.32 and 3.1 kg of horn into HK. Prior to the VIS for AFCD, along with over 6 hours of online training for judiciary on how to use the statements to inform their sentencing decisions, the last rhinoceros case heard had a 2-month minimum sentence. However, each of the defendants this time were imprisoned for between 8-12 months.

In July 30, 2019 a man was convicted for attempting to smuggle HH beaks using express air parcels. He received 32 months imprison-

ment = the highest sentencing received for a wildlife trade case in HK.

* Significant increase in sentencing * Judiciary feedback has been positive

3. Genetics Update

The key aim is to create a "genoscape" to determine the origin of casques, which will aid law enforcement and conservation by providing more in-depth information on: poaching hotspots, trade routes and populations most at risk.

This is a multi-step process that includes the collection and sequencing of samples from seized casques and wild (but also museum) samples to ultimately create a genetic map – linking seizures to reference samples.

The genetics team led by HKU partners are currently in the process of applying for the various sampling permits for each range state. Sampling from seized casques in HK has already begun. We hope to commence museum sampling within the next six months, and field sampling once all the paperwork has been processed and approved. In preparation for this, feather, faeces and tissue/blood sampling kits and a guide have been prepared and standardised. The team will be supported by a Nat Geo Grant, and have applied for an additional Wild Genomes Grant to extend the work.



Genetics sampling kit by Hong Kong University

Separately, using confiscated casques stored in a museum in Indonesia, the Indonesian Institute of Sciences (LIPI) carried out a number of genetic enquiries, and these include:

- Diagnostics (e.g. species identification)
- Sex determination using HH casques
- Genetic diversity and intraspecific variation among HH population, as well as geographic origin

As there is a need for efficient protocols for working with casques of varying conditions, a secondary aim of these studies is to optimize the laboratory protocol for keratinous material.

We understand that the Department of National Parks (DNP) Thailand as well as Perhilitan in Peninsular Malaysia have also developed expertise in carrying out a number of genetic enquiries on confiscated hornbill casques.

4. Stockpile Management (Seized Casques)

As per the action plan, a morphological assessment of confiscated casques has commenced in Indonesia. This includes looking at characteristics such as beak conditions across confiscations, as well as sex and age differences. This will allow us to better understand the features of the trade but also impact on wild populations.

A preliminary assessment was carried out on 248 out of 259 beaks seized in 2013 and currently held in Jakarta (possibly from West Kalimantan), as well as a 2016 Samarinda confiscation with 101/150 beaks from East Kalimantan. Much information could be inferred and deduced from these seized specimens prior to stockpile destruction. The proposed management protocol led and drafted by Rangkong Indonesia is displayed in the image above.

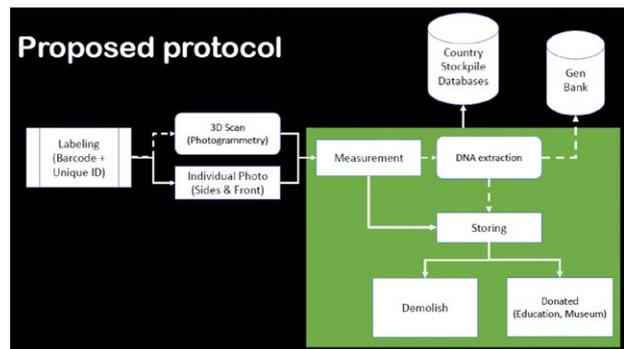


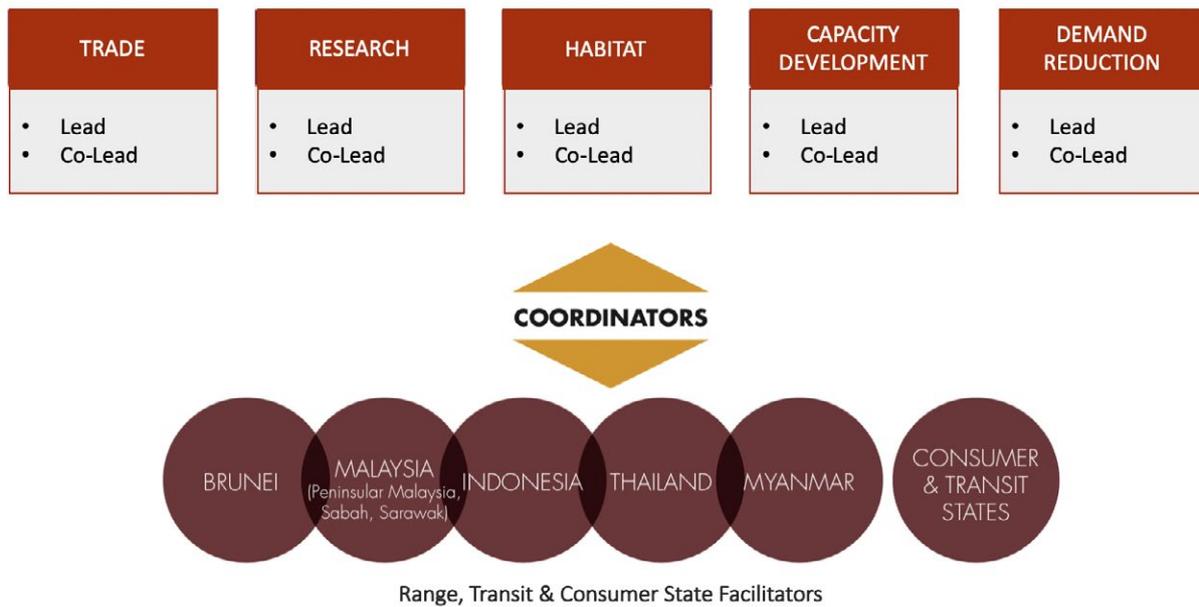
Image by Yok Yok Hadiprakarsa.

5. Notable Poaching Incidents in 2019

Malaysia (Sabah) - Across a number of months from May to October 2019, while carrying out field activities as part of the Kinabatangan Hornbill Conservation Project, members from local NGOs - Gaia and HUTAN-Kinabatangan Orangutan Conservation Programme encountered poachers at one of the field sites in Kinabatangan, Sabah, Malaysia. During this time (October 2019), a female HH was noted to have gone missing, it is still unknown if the forest intruders and disappearance of the female hornbill are linked. The situation intensified as these intruders were armed and aggressive to field staff. Reports were made to the Malaysian authorities in November, and the police force as well as the Special Armed Forces PGA accompanied field wardens and researchers into the field site – the intruders appeared to have disappeared. Subsequently, through the assistance of Gaia, five arrests were made at the site, and Gaia were forced to postpone near-future field activities.

Malaysia (Sarawak) – Recent seizures in Kapit, Sarawak include a massive seizure in October 2019 in which 800 animal parts were confiscated (<https://www.freemalaysiatoday.com/category/nation/2019/10/10/sarawak-forestry-discovers-hornbill-ivory-in-massive-wildlife-seizure/>). Of these, 148 were helmet-like blocks believed to be from the HH. It has been learned that the

The Helmeted Hornbill Working Group Structure



SFC has sent the samples for genetic analysis to Perhilitan, Peninsular Malaysia. The results of the analysis to confirm whether these helmeted like blocks were HH parts are pending.

Thailand - HH poaching incidents were reported from Thailand in the media in 2019. (<https://www.bangkokpost.com/thailand/general/1759979/urgent-action-called-for-over-hornbill-hunting>). DNP’s Wildlife Conservation Office Director Ms. Kanchana Nittaya stated that – “In three previous crackdowns on HH hunting, five hunters were arrested while three live HH and one carcass were seized”. There has also been news about HH products being sold in Thailand but fortunately, monks and celebrities have spoken against their superstitious use.

Indonesia – 72 HH casques were seized in Jakarta on 17 July 2019. The WCS Indonesia team supported the Government of Indonesia with the seizure, while Rangkong Indonesia supported the government with the identification of casques.

6. Demand Reduction

The HHWG has unanimously agreed to the establishment of a fifth subgroup for demand reduction (see proposed group structure in the image) in March 2020. The nominated and accepted Subgroup Lead is Mr. Jack Lam who is an independent researcher based out of HK.

The proposed subgroup’s plan to address behavior change, and therefore demand reduction is summarized briefly below in a series thought processes and pre-existing work:

- 1) Prevalence of Trade and Market Trends
 - What is the prevalence of trade online and in physical shops?
 - What are the key outlets (e.g. online forums, social media, e-commerce platforms and physical shops) of HH products?
 - What type of HH products (e.g. carvings, jewelry, cultural collectables) are

in demand?

2) Consumer Profiling

- Is there a core group of consumers that buy/collect regularly? Or are consumers one-off/opportunistic buyers? Which group represents a stronger driver of demands for HH products?
- Consumer demographics, such as gender, age groups, socio-economic and cultural backgrounds.

3) Consumer Motivations, Values & Triggers that drive purchase

- What physical traits, descriptions and values are being attached to HH products?
- Identifying potential motivations and purposes of consumption, including:
- Personal collection (cultural value—association with products such as elephant ivory and rhino horn, artistic value, historic value, rarity value).
- Self-expression (status symbol, fashion statement).
- Gifting (pertaining to cultural occasions such as new year, weddings, or other forms of networking).
- Material investment.

4) Current (perceived) deterrents to buyers

- Legislation – IUCN status, CITES regulations, and local protection statuses.
- Law enforcement and penalties – perceived risk of arrest, conviction, and severity of punishment.
- Animal welfare concerns – considerations for the cruelty of poaching.
- Conservation values – consideration for the ecological significance, intrinsic value, and rarity of helmeted hornbills.
- Social pressure against the consumption of wildlife products.

5) Co-occurrence with other high value wildlife collectibles

- Does tightening of elephant ivory legislations have positive or negative impacts on HH purchase?
- How do campaigns on other relevant wildlife products affect the consumption of HH products?
- What is the expected trend over time?

7. Other matters

The HHWG members conducted several projects on field surveys and community engagement at key HH to better understand distribution gaps and encourage and empower local communities to protect and conserve their resident HH populations.

7.1 Field Surveys of the HH

Several rapid field assessments and detailed population surveys for hornbills were undertaken in the range countries to update knowledge gaps. These include activities in **Indonesia** (Kapas Hulu in West Kalimantan, Indonesia conducted by Rangkong Indonesia; a protected area in West Kalimantan, Indonesia by Planet Indonesia; Harapan forest, Sumatera by Burung Indonesia and BirdLife International; Gunung Leuser National Park and Bukit Barisan Selatan National Park, Sumatera, Indonesia by the National Park authorities and WCS), **Malaysia** (Belum-Temengor forest complex in Peninsular Malaysia by Malaysian Nature Society and BirdLife International; Rimba and Terengganu Nature Guides; Perhilitan & Pelindung; Sarawak Forestry Corporation with Thailand Hornbill Foundation; HUTAN, GAIA and 1StopBorneo with Sabah Wildlife and Sabah Forestry), **Myanmar** (by Biodiversity and Nature Conservation Foundation and BirdLife International),

Thailand (Bang Lang National Park and Budo mountain by Hornbill Research Foundation; and Khao-Sok and Khlong Saeng landscape by Bird Conservation Society of Thailand and BirdLife International), Brunei (new field surveys carried out by Universiti Brunei Darussalam, and part of a wider collaboration with Birdlife International Asia, United Arab Emirates University and Wildlife Reserves Singapore (WRS)).

7.2 Community Engagement

Several projects on the community's perceptions of hornbill conservation were completed at several locations in 2019 such as in Indonesia (Kapuas Hulu District, West Kalimantan by Rangkong Indonesia, West Kalimantan by Planet Indonesia); Myanmar by Biodiversity & Nature Conservation Foundation (BANCA) & BirdLife International); in Malaysia by the Malaysian Nature Society, BirdLife International and Sarawak Forestry Corporation, HUTAN, GAIA and 1StopBorneo; in Thailand by the Thailand Hornbill Project.

The Community Engagement subgroup of HHWG has created a list of guidelines that will help standardize the documentation of Hornbill Guardian programs across the range-states.

7.3 Ex situ discussion

- To-date, one bird is known to be held at Penang Bird Park – a male individual. As very few HH exist in captivity, there is an immediate to short-term aim of running a husbandry workshop on general hornbill-keeping for relevant stakeholders (e.g. zoos/rescue centres in Indonesia). This would be in preparation for a situation where a live HH is rescued from the wild or confiscated from the trade. This will be combined with the production of guidelines for the husbandry/health of HH under human care – Jurong Bird Park, part of WRS has been tasked to take the

lead on this.

- Ex-situ needs assessment – To look at carrying out a species-specific ICAP - The Integrated Collection Assessment and Planning (ICAP) workshop brings in situ and ex situ communities together to apply the decision process of the IUCN ex situ guidelines to the task of regional or global collection planning.

Recommendations for CITES

Context - The HH conservation strategy and action plan (2018 – 2027) outlines the key actions needed to tackle the trade in and conservation of the species. Whilst the strategy was developed and endorsed by several organizations including some range state governments, NGOs and research institutions and adopted by IUCN, it does not mandate a process through which governments and non-government stakeholders (such as NGOs) can collaborate in the joint implementation of the conservation action plan.

Given HH's sensitivity to poaching, data sharing agreements amongst key stakeholders (particularly governments and non-government actors) have been difficult to establish since the launch of the action plan in 2018. For example, HHWG members often do not have access to the results from the DNA analysis conducted by governments on confiscated seizures to ascertain the identity of HH products. Lack of such data is hindering the establishment of a robust range-wide "genoscape" to determine the origin of casques from the wild which can aid law enforcement in future (see section 2.2). Equally, several range state government patrols have in the past collected (or continue to collect) HH population data during large-scale mammal census but HHWG does not have access to such datasets, which hinders range-wide analyses including

developing an accurate distribution map and global population estimate. This has important conservation implications.

Below we outline recommendations to aid collaboration among stakeholders and the importance of pushing for urgent implementation of CITES decisions on the Helmeted hornbill in range, consumer and transit countries.

- Data access and sharing - through CITES encourage governments to work together and facilitate data sharing with relevant experts such as HHWG where required. Relevant platforms and mechanisms with controlled access may need to be setup as these are species sensitive to poaching activities.
- Government focal points – through CITES encourage more active engagement between governments in range, transit and

consumer countries/states and relevant experts (such as HHWG) by the appointment of a government representative in each concerned state/country with which HHWG can liaise with.

- Concern about increasing trade in more range countries - There are new concerns with the recent seizures and trade in more range countries (such as Thailand and Malaysia) and possible consumer countries (such as Laos and Vietnam). CITES needs to urge range countries to push for implementation of CITES decisions.
- Discussion with consumer and transit countries - It is important that CITES have discussions with consumer and transit country officials (e.g. China and Laos) at high-levels to push for implementation of CITES decisions on controlling/reducing the trade in HH.



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Hornbill Specialist Group

