



**TRAFFIC**  
the wildlife trade monitoring network

AUGUST 2019

# TRADING FACES

ONLINE TRADE OF HELMETED AND OTHER  
HORNBILL SPECIES ON FACEBOOK IN THAILAND

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## TRAFFIC REPORT

### TRADING FACES

#### Online trade of Helmeted and other hornbill species on Facebook in Thailand

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# CONTENTS

<b>1</b>	<b>Introduction</b>	<b>1</b>
	Executive Summary	1
	Introduction	7
	Methods	9
<b>2</b>	<b>Results and discussions</b>	<b>10</b>
	Online trade in hornbills	11
	Helmeted Hornbill	12
	Other hornbill species	20
	Protection status - National and International level	25
	Price	26
	Facebook groups	27
	Seller's location	27
	CITES trade	28
	Seizures of hornbills in Thailand	29
<b>6</b>	<b>Conclusions and recommendations</b>	<b>30</b>
	References	33
	Annex	35
	Image credits	36

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# HELMETED AND OTHER HORN BILLS TRADED ON FACEBOOK IN THAILAND



**546**

parts from  
**9** species

**236**  
Posts

**32**  
groups



**64**  
months  
June 2014

**337,919**  
members at its peak

≡  
**April 2019**



Pendants



Necklaces



Belt  
buckles



Rings



Casques





# EXECUTIVE SUMMARY

Hornbills are regularly recorded in trade, particularly the Helmeted Hornbill *Rhinoplax vigil* in recent years. This study was conducted to determine the scale of the online trade in Helmeted Hornbills and other hornbill parts and products in public and closed Thai-language Facebook groups focused on wildlife products. Any trade in hornbill parts or products is prohibited under Thailand's Wild Animal Reservation and Protection Act B.E. 2535 (1992) (WARPA), which will be replaced by the revised law passed by the National Assembly on 24th May 2019, and comes into effect on 20th November 2019.

A six-month online survey from 22nd October 2018 to 19th April 2019 found a minimum of 236 Facebook posts offering a minimum of 546 hornbill parts and products in 32 of the 40 groups surveyed. These were posted over a period of 64 months, spanning June 2014 to April 2019. The availability of hornbill commodities on Facebook rose in early 2015 to a peak in 2016. Another peak in early 2018 was recorded. Since then, trade activity appeared to have reduced in 2019 (until April, the most recent period of the analysis within the groups monitored; and based on

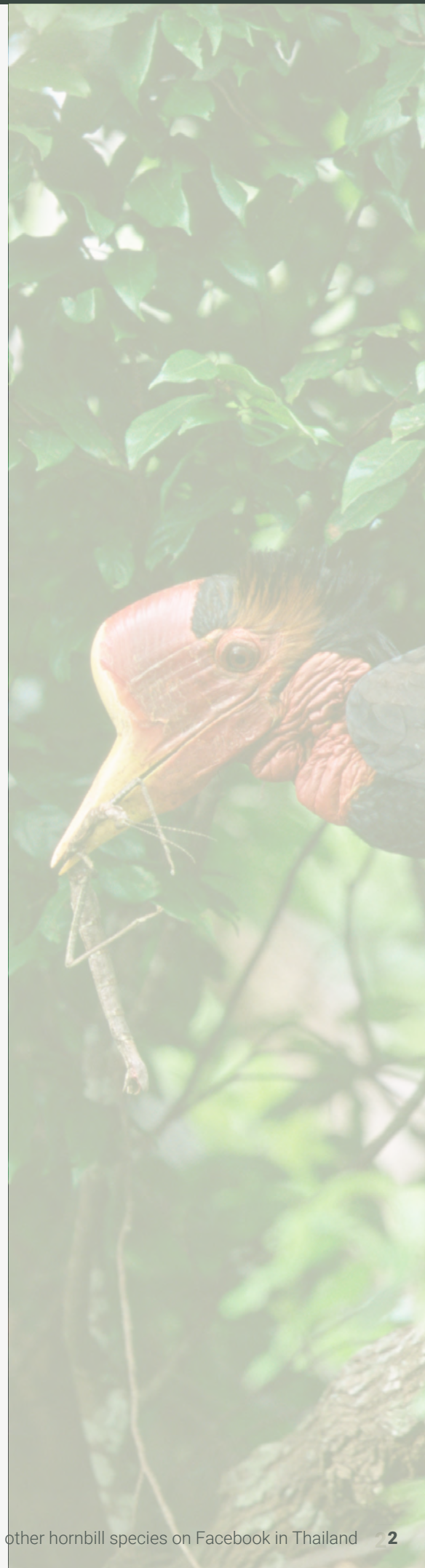
the monthly average of posts). However, it is unclear if this is a result of shifting patterns of demand away from hornbill parts and products, or a result of traders moving to new groups or platforms that are more difficult to detect, or other reasons.

Helmeted Hornbill constituted 83% (n=452) of all hornbill commodities recorded during this period. Eight main types of commodities were offered: whole casques, pendants, belt buckles, rings, necklaces, bracelets, taxidermy items and other individual pieces. Of these, 70% (n=315) were worked products, 68% were classified as individual pieces. Some of the jewellery items were set with parts of other wildlife, including elephant ivory and *Tiger Panthera tigris* teeth and claws. Most raw products comprised individual shavings. The most expensive item was a necklace with an ivory and Helmeted Hornbill casque pendant that was offered for USD730. Apart from Helmeted Hornbills, whole heads of eight other hornbill species, all native to Thailand, were also recorded in the survey; the Great Hornbill *Buceros bicornis* formed the majority of these (61 items; 66%).

The research indicated some level of cross-border smuggling of these products, with the second-highest seller in the Thai group reportedly located in Penang, Malaysia, and another trader located in Cambodia. Nine species of hornbills were recorded in this survey: are all are protected under Thai national legislation as well as under the Convention on International Trade in Endangered Wild Flora and Fauna (CITES).

Cursory checks in August 2019 revealed that the trade has either reduced or gone underground: 35 of the 40 groups appear to have been removed. This may have been, in part at least, due to action taken by Facebook to remove the posts after TRAFFIC shared the survey data with them. TRAFFIC have also noted that when law enforcement action is taken, or when posts are removed by Facebook, sellers tend to keep a low profile by either shutting down pages or not offering prohibited wildlife, parts or products for sale. Nonetheless, three new posts from June to July, offering four Helmeted Hornbill parts and products, were found in one of the remaining five groups in July 2019. It would be important to continue with further research and investigations in these and other groups to ascertain the status of the online trade in Helmeted and other hornbills in Thailand.

This research highlights that hornbills, a group of protected and threatened species, continue to be offered for sale online. Although Thai authorities have successfully carried out enforcement action in at least five online trading cases involving hornbills, trading activity is persistent. Tackling the illegal wildlife trade online is challenging, and co-ordinated efforts such as the following are recommended:



# LAW ENFORCEMENT

**Law enforcement efforts are critical in ending illegal trade.**

In April 2017, the Thai government established a dedicated taskforce under the Department of National Parks, Wildlife and Plant Conservation (DNP), locally known as “Yiaw Dong” or the Wild Hawk Unit. The Unit is authorised to search, seize and arrest individuals linked to illegal possession and trade of wildlife in Thailand. Thailand’s primary wildlife protection legislation, WARPA, has also recently been updated and comes into force on 20 November 2019 with stronger penalties against those who violate the law. Any effort to provide law enforcement support should therefore be done in co-ordination with the Wild Hawk Unit. Increased vigilance is also recommended to protect Thailand’s hornbill populations, particularly Helmeted Hornbills, against poaching. Further, as cross-border trade was implied by this research, multilateral collaboration with implicated countries should take place to identify the dynamics of this trade for necessary action.





# THAI AUTHORITIES AND FACEBOOK

**Thai authorities and Facebook are encouraged to establish a close working relationship and develop joint strategies to tackle this problem.**

As part of Facebook's continued efforts with the TRAFFIC-, WWF-, and IFAW-facilitated Coalition to End Wildlife Trafficking Online, Facebook introduced a policy in April 2019 to ban the trade of all live animals on their platform from non-verified physical businesses, as well as all endangered species and their products across the platform. This is already a positive first step in tackling this problem, with the company taking leadership in prohibiting such activities by providing TRAFFIC- and WWF-developed training to its global trust and safety staff on how to identify illegal wildlife products on their platform. Facebook has also committed to taking down posts that are in violation of their standards, which to some extent serves to reduce the chances of purchasing such items. But like any crime, those flouting the law will explore opportunities and chances to continue their activity in less-detectable groups, as well as other platforms. Only with rigorous and continued monitoring, investigations and strong convictions for those found engaging in criminal activity can the scale of this trade be reduced over time.



Importantly, the public should continue to be encouraged to report wildlife crime, given the ease of gaining membership and access to groups that trade wildlife illegally.

The following reporting methods are available:

## A REPORT TO **LAW ENFORCEMENT**

A report to law enforcement agencies at a national level such as the Wild Hawk Unit, Department of National Parks, Wildlife and Plant Conservation (DNP) or the Natural Resources and Environmental Crime Suppression Division.

This can be done through the DNP Hotline (call 1362) and their Facebook page (<https://www.facebook.com/1362DNP0>) as well as the Wild Hawk Unit Facebook page (<https://www.facebook.com/DNP.WILDHAWK>)

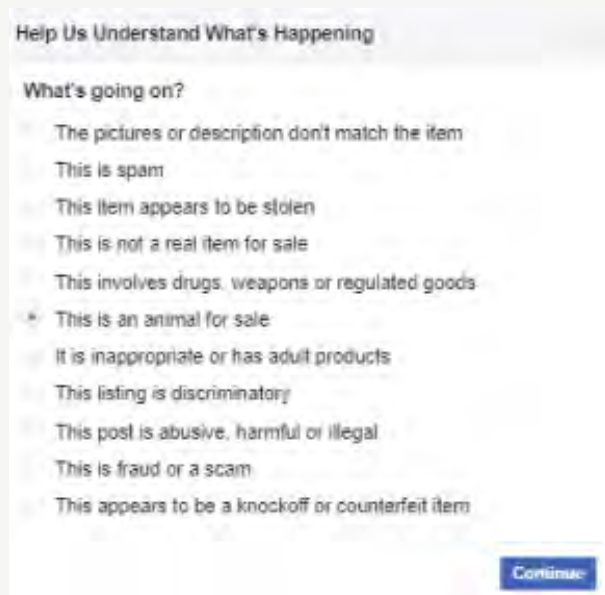
## B DIRECT REPORT TO **FACEBOOK**

A direct report to Facebook: Facebook's Community Standards has a policy against any illegal activity, including wildlife crime ([https://www.facebook.com/help/181495968648557?ref=community\\_standards](https://www.facebook.com/help/181495968648557?ref=community_standards)).

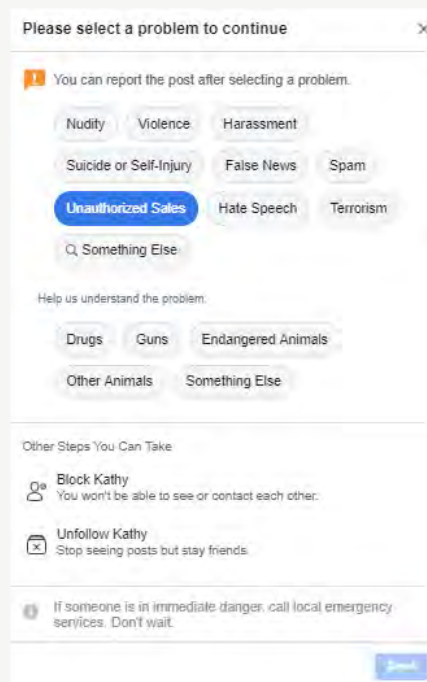
Reports can target posts, messages, groups and other elements which may constitute a violation of legislation. Facebook has also developed wildlife-specific reporting workflows for Marketplace, organic (including media), group, and event content that violates its recent wildlife policy updates, which enable users to report unauthorised sales of live animals and endangered species in real-time.



### Facebook Marketplace



For organic content, media, groups and events:



C

## A REPORT THROUGH **TRAFFIC**

A report through TRAFFIC, via the Wildlife Witness App that can be downloaded for:

### **iOS**

<https://itunes.apple.com/us/app/wildlifewitness/id738897823?mt=8>

### **Android**

<https://play.google.com/store/apps/details?id=com.taronga.wildwitness>



screenshot of an advert posted on a Facebook group in Thailand



# INTRODUCTION

The Helmeted Hornbill *Rhinoplax vigil* is a large hornbill species that occupies lowland forests of Brunei Darussalam, Indonesia, Malaysia, Myanmar, and Thailand; it is extinct in Singapore (BirdLife International, 2018). A distinguishing feature of the species is its striking helmet-like casque consisting of solid keratin, the only hornbill species to have this (Kane, 1981; Kemp, 2001). The attractive yellow, orange and red colouring of the casque makes it a prized luxury item, used in a similar fashion to elephant ivory. It is highly sought after for trade, which has caused populations in countries like Indonesia to be targeted (Beastall *et al.*, 2015; Collar, 2015; Krishnasamy *et al.*, 2016). Such poaching and trade persists, despite it being protected by legislation in all its five current range countries (Jain *et al.* 2018) and through an Appendix I listing in the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) since 1975, which prohibits all international commercial trade in parts, products and specimens.

An analysis of seizures showed that at least 2,878 Helmeted Hornbill casques and products were seized from at least 59 known confiscations from 2010 to 2017 (TRAFFIC, 2017). A majority of these—2,170 casques—were confiscated between March 2012 and August 2014 in China and Indonesia alone (Beastall *et al.*, 2016). Trade also persists openly in both physical and online markets in some parts of Asia: TRAFFIC’s monitoring of 25 e-commerce and antique-selling websites in China found in 2015 more than 46 transactions of Helmeted Hornbill casques in just one month (Yu and Jia, 2015). In 2016, evidence of illegal international trade was also recorded in Lao People’s Democratic Republic (PDR), with at least 74 Helmeted Hornbill products, including 11 whole casques being sold in three locations in the country (Krishnasamy *et al.*, 2016).

To strengthen international provisions in the protection of Helmeted Hornbills, Resolution Conf. 17.11 on Conservation of and Trade in

<sup>1</sup> <https://cites.org/sites/default/files/document/E-Res-17-11.pdf>



## HELMETED HORNBILL CASQUES

are highly sought after for trade, as it is used in a similar fashion to elephant ivory

### SEIZURE ANALYSIS

# 2,878

Helmeted Hornbill casques and products seized between 2010–2017

### IN A SINGLE MONTH

# 46+

transactions of Helmeted Hornbill casques were observed on 25 e-commerce and antique-selling websites in China in 2015

### A MAXIMUM FINE OF

# THB1 MILLION

was passed by the National Assembly in Thailand on 24th May, pertaining to the hunting, possession and trade of Helmeted Hornbills

Helmeted Hornbill<sup>1</sup>, along with three Decisions<sup>2</sup> directed at the Parties, the Secretariat and the Standing Committee, was passed by CITES. This Resolution, led by Indonesia and adopted by Parties at the 17th meeting of the Conference of Parties to CITES in 2016 (CoP17), emphasizes the urgent need and actions required by range and consumer countries to tackle the suite of problems affecting this species. In 2018, the Status Review, Range-wide Conservation Strategy and Action Plan (2018–2027) (Action Plan) was launched by the IUCN Species Survival Commission Hornbill Specialist Group. Under the auspices of the Helmeted Hornbill Working Group, the Action Plan outlines strategies required to safeguard this species, including a dedicated goal and objectives to eliminate the trade in Helmeted Hornbills, their parts and derivatives (Jain *et al.*, 2018).

Illegal wildlife trade increasingly takes place on online platforms, including in many Southeast Asian countries (Bouhuys and van Scherpenzel, 2015; Krishnasamy and Stoner, 2016; Sinaga, 2017; Indenbaum, 2018; Cannon, 2019). This includes in Thailand, where a total of 1,521 live wildlife species were recorded for sale from just 23 days of monitoring for 30 minutes a day (Phassaraudomsak and Krishnasamy, 2018) from just 12 Facebook groups, and including Helmeted Hornbill, Knobbed Hornbill *Aceros cassidix*, Rhinoceros Hornbill *Buceros rhinoceros*, Oriental Pied Hornbill *Anthracoceros albirostris* and Great Hornbill *Buceros bicornis*. A separate survey on Facebook by the Bird Conservation Society of Thailand found hundreds of protected and threatened bird species offered online from December 2015 to April 2016, including Helmeted, Great, and Rhinoceros hornbills (The Nation, 2017). These revealed that the online trade of hornbills in Thailand was active. Separate research over 25 days between June–July 2016 found 2,550 elephant ivory items offered for sale online in Thailand (Indraswari *et al.* in prep), revealing an active online marketplace taking place in Thailand not just for live animals, but also for wildlife parts.

TRAFFIC's surveys of ivory shops and markets in Thailand have not uncovered any Helmeted Hornbill products (Krishnasamy *et al.*, 2016a; TRAFFIC, unpub. data) despite Helmeted Hornbill products being observed for sale together with luxury wildlife products such as ivory in other countries (e.g. Lao PDR (Krishnasamy *et al.*, 2016b)). TRAFFIC therefore

<sup>2</sup> <https://cites.org/eng/dec/valid17/81888>

undertook this current study to determine the scale of the trade in Helmeted Hornbill parts and products available on Facebook in Thailand. The species is protected under the Wild Animal Reservation and Protection Act B.E. 2535 (1992), Thailand’s primary wildlife protection legislation which is also its CITES-implementing legislation, making all trade in Helmeted Hornbills illegal in the country. The law was further revised and strengthened in early 2019, passed by the National Assembly on 24th May, and comes into effect 180 days later on 20th November 2019. Under the new WARPA, conviction for violations pertaining to the hunting, possession and trade carries a maximum fine of 10 years imprisonment and THB1,000,000 (USD32,436) fine. Convictions for violations on the import and export of the species carries a higher maximum penalty of fifteen years imprisonment and/or THB1,500,000 (USD48,654) fine.

# METHODS

A total of 40 groups were identified as selling wildlife parts and products (excluding live animals) on Thai-language Facebook groups. These were monitored for six months (from 22nd October 2018–19th April 2019 for one hour per day/five hours per week. One of these groups was deleted in mid-April 2019, but information from this group was included in the analysis. Effort comprised keyword searches involving hornbill parts offered for sale. Keyword search revealed two key things—that the first post (that was still present during the study period) appeared in June 2014 and that offers for trade also included a variety of hornbill species. Survey effort therefore used keyword searches (Table 1) and extracted information on all offers for hornbill products from June 2014–April 2019, comprising,

where available, the number of items offered, location of trader, price, source and legitimacy. Identification of the items was based on the seller’s description and pictures. The number of items were counted based on offers posted by traders (where there were no accompanying images; the figures offered by the trader were taken to be true), or the number of individual items were counted and/or estimated based on images posted. Where posts were duplicated, they were eliminated from the individual counts, but considered as one entry, and included in the groups that originally offered the hornbill product for sale. Products stated or identified to be fake were recorded but excluded from analysis. A conversion rate of THB30.83 to USD1 was used, as at 31st July 2019 on [www.xe.com](http://www.xe.com).

KEYWORDS USED	LOCAL LANGUAGE (THAI)
Hornbill	นกเงือก, เงือก
Helmeted Hornbill	นกชนหิน, ชนหิน
Golden Jade	หยกทองคำ, หยกทอง

**Table 1:** Keywords used to search for hornbills on Facebook groups.

The online trade data focus was on gathering information pertaining to Helmeted Hornbills, but also presented and discussed here is the trade in other hornbill species offered for sale online. All information has been shared with both Facebook and Thailand’s Department of National Parks, Wildlife and Plant Conservation (DNP) for their monitoring and action. A rapid analysis of seizures involving hornbills was undertaken to provide additional insights, particularly from a law enforcement perspective.

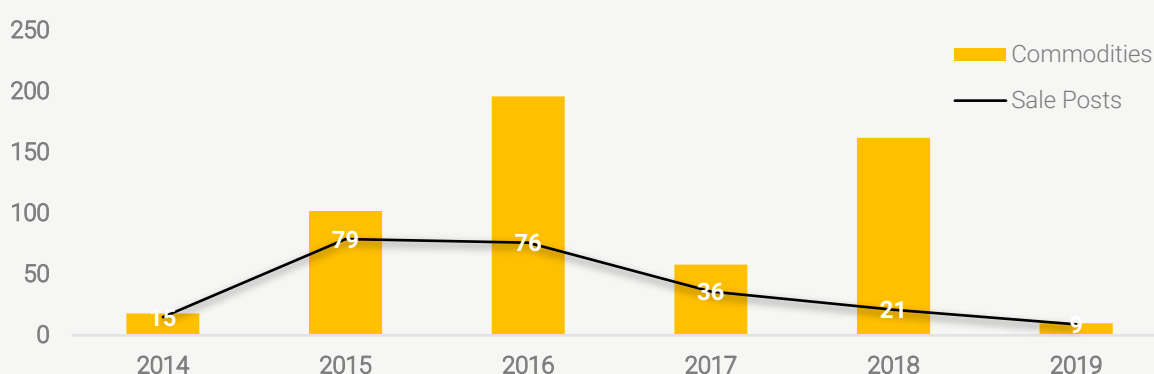


# RESULTS AND DISCUSSION

# ONLINE TRADE IN HORNBILLS

During the six-month survey from 22nd October 2018 to 19th April 2019, a minimum of 236 Facebook posts offered a minimum of 546 hornbill parts and products in 32 of the 40 groups surveyed (Figure 1). This trade was recorded over a period of 64 months, or approximately 5.5 years, spanning June 2014 to April 2019. These were posted by 118 Facebook accounts. The open availability in hornbill commodities on Facebook rose in early 2015 to a peak in 2016. Another peak in early 2018 was recorded. Since then, trade activity appeared to have reduced in 2019 (the most recent period of the analysis within the groups monitored). However, it is unclear if this is a result of shifting patterns of

demand away from hornbill parts and products, or a result of traders moving to new groups or platforms that are more difficult to detect. Another possible reason may be that Facebook has been working closely with the Coalition to End Wildlife Trafficking Online since early 2018 on efforts to reduce illegal wildlife trade on their platform. Increased vigilance and collaboration with wildlife experts through coalition members may also have contribute to this reduction observed in the 2018–2019 period. Further long-term monitoring is required to determine the most significant drivers of change, and how these current trends will further develop.

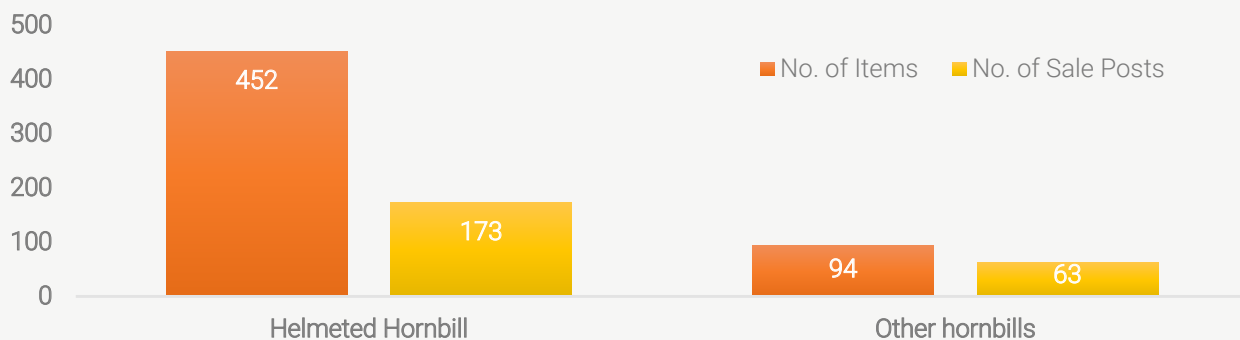


**Figure 1:** Overall hornbill products sale posts and commodities divided by year

*\*2019 survey and analysis only cover until the period April and not the full year, unlike for the previous years.*

Among the 546 hornbill items offered, 452 comprised Helmeted Hornbill products (83%) in 173 sale posts, while 94 items involved other hornbill species (17%) in 63 sale posts (**Figure 2**).





**Figure 2:** Proportion between Helmeted Hornbill and other hornbills by No. of items and No. of sale posts

# 1 HELMETED HORNIBILLS



In 2016 and 2018 there were peaks in numbers of Helmeted Hornbill parts and products offered for sale, recording at least 171 (38%) and 162 (36%) items (Figure 3). Eight main types of Helmeted Hornbill products were offered during this period: whole casques, pendants, belt buckles, rings, necklaces, bracelets, individual pieces as well as taxidermy items (Table 2). Similar to the overall data for all hornbill products offered, Helmeted Hornbill trade on these 32 groups peaked in 2016 and 2018, and appears to have reduced in 2019. It should be noted however that the 2019 survey and analysis only cover until the period ending April and not the full year. It is unknown if this is an indication of reduced trade or a shift in offers being made on other Facebook groups or other online trade platforms, and one that warrants further research and investigations.

## IN 2016

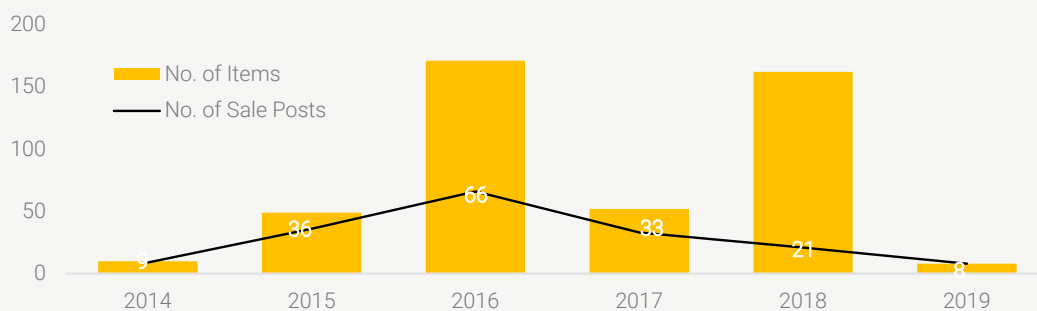
# 171

numbers of Helmeted Hornbill parts and products observed for sale

## IN 2018

# 162

numbers of Helmeted Hornbill parts and products observed for sale



**Figure 3:** Proportion of Helmeted Hornbill products divided by year

\*2019 survey and analysis only cover until the period April and not the full year, unlike for the previous years.

CATEGORY	WORKED	RAW	TOTAL	%
<b>Individual Pieces</b>	181	125	306	68
Casque pieces	130			
Casque shavings (estimated)		108		
Beads	51			
Beak* tips		16		
Casque powder (packet)		1		
<b>Ring</b>	65		65	14
Carved rings	32			
Beak tips used on rings	20			
Carved rings with tiger claw	7			
Carved rings with ivory	3			
Carved rings with tiger teeth	1			
Carved rings with ivory and tiger claw	1			
Beak tip used on rings with ivory	1			
<b>Pendant</b>	34		34	8
Carved pendant	19			
Beak tip used on pendant	10			
Pendant with tiger teeth	2			
Pendant with tiger claw	2			
Pendant with ivory	1			
<b>Whole Casque</b>	16	12	28	6
<b>Necklace</b>	12		12	3
Beaded necklaces	7			
Necklace with pendants made of casques	2			
Necklace with ivory and casque pendant	2			
Necklace with ivory	1			
<b>Belt buckle</b>	5		5	1
<b>Bracelet</b>	1		1	0
<b>Taxidermy</b>	1		1	0
<b>Total</b>	<b>315 (70%)</b>	<b>137 (30%)</b>	<b>452</b>	<b>100</b>

**Table 2:** Helmeted Hornbill products offered for sale on over the 2014–2019 period

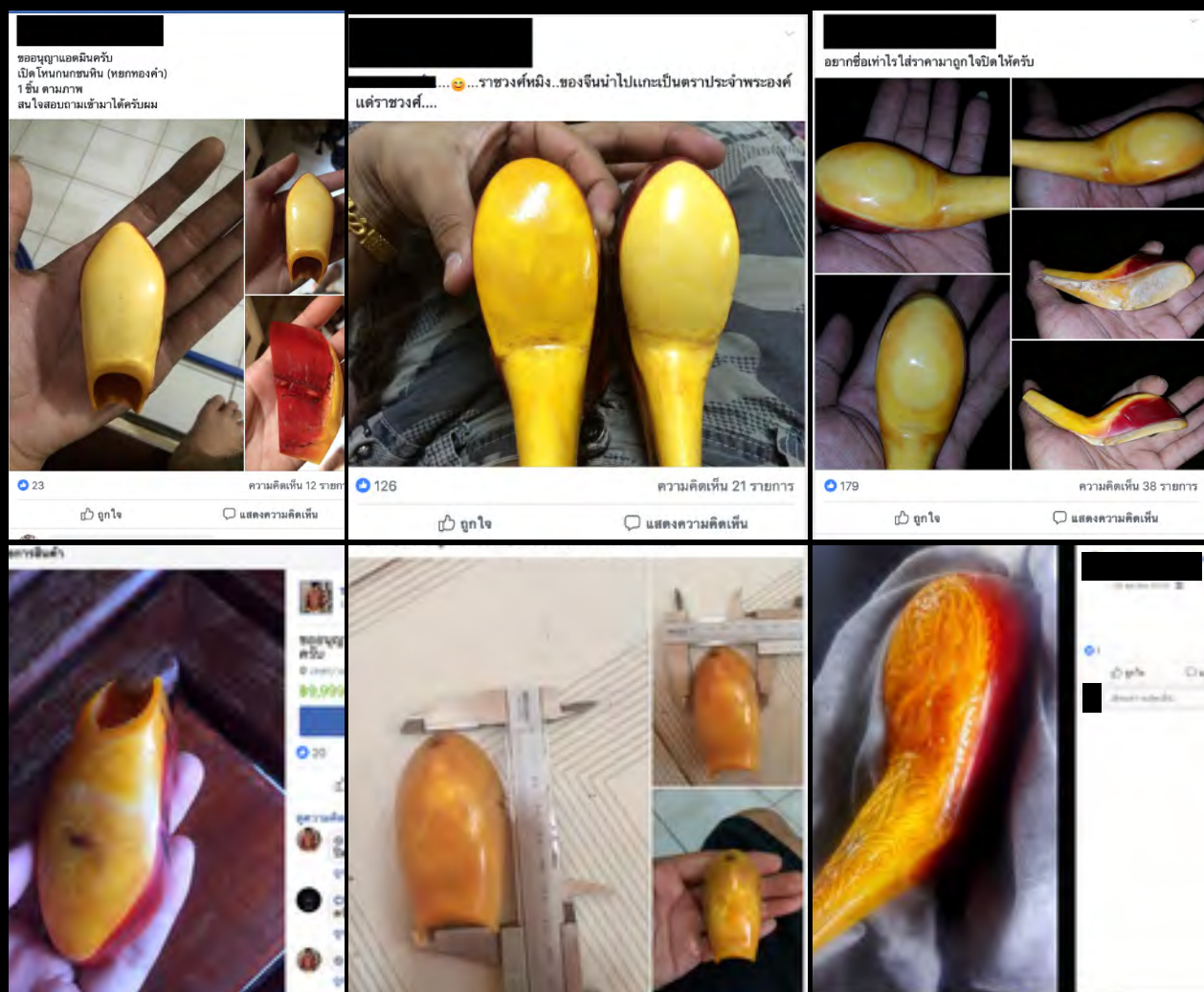
\* where these were recorded, the species of hornbill the beaks came from was reportedly the Helmeted Hornbill

Worked products accounted for 70% (n=315) of the 452 Helmeted Hornbill parts and products, with the remaining 30% as raw products, largely comprised of individual shavings (Table 2). Excluding the individual pieces, the top three types of worked products were rings, followed by pendants and casques. The individual pieces, representing 68% of all products recorded during this period, were very likely intended to be used to create full worked products, based on the recorded pieces and the observation of these items used in other worked product types. Interestingly, a package

reported as Helmeted Hornbill casque powder was recorded. Posts note that these were derived from residue of carved products, but its use was not mentioned. Beak tips, where they were recorded, were reported to be from Helmeted Hornbill, and therefore assumed to be such. The appearance of beak tips is not unusual and has been observed before; in a case in Malaysia in August 2016, authorities made a seizure of 45 hornbill beak tips (Cheng, 2016; TRAFFIC, 2016), which appearance-wise was similar to those recorded during this research in Thailand.

## TYPES OF HELMETED HORNBILL PRODUCTS

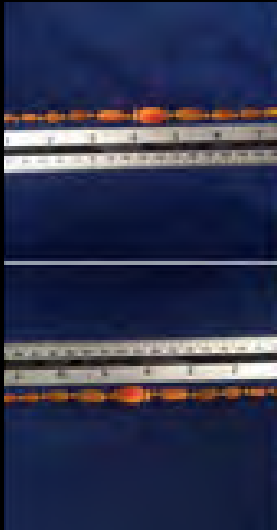
# PRODUCTS



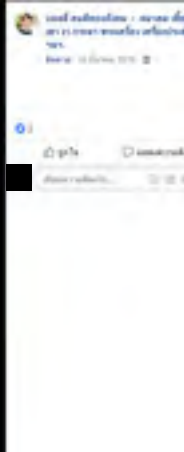
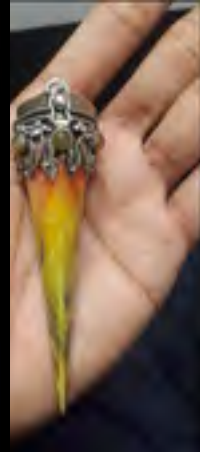
CASQUES – WORKED



CASQUES - RAW



BRACELETS



PENDANTS

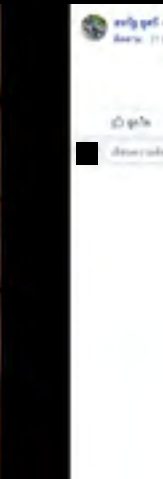
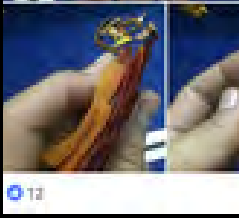
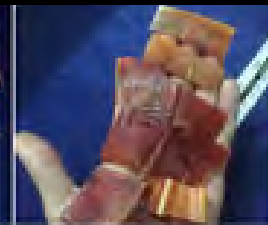
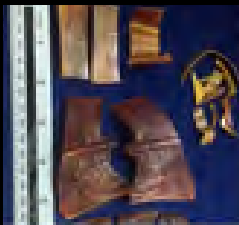
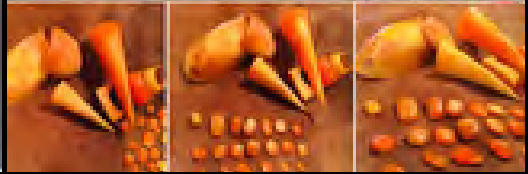


Tinnapat Nakyaiyatum  
9 มกราคม 2017

เปิดแหวน #หยกทองคำ และสายสวยๆเงิน 92.5% ขนาดฟรียไซร์  
บรรยายด้วยภาพ  
สนใจ ๒ จร้า



RINGS



**PIECES** casque, beads, beak tips, casque powder





BELT BUCKLES



TAXIDERMY

# 2 OTHER HORNBILL SPECIES PRODUCTS



GREAT HORNBILL BUCEROS BICORNIS



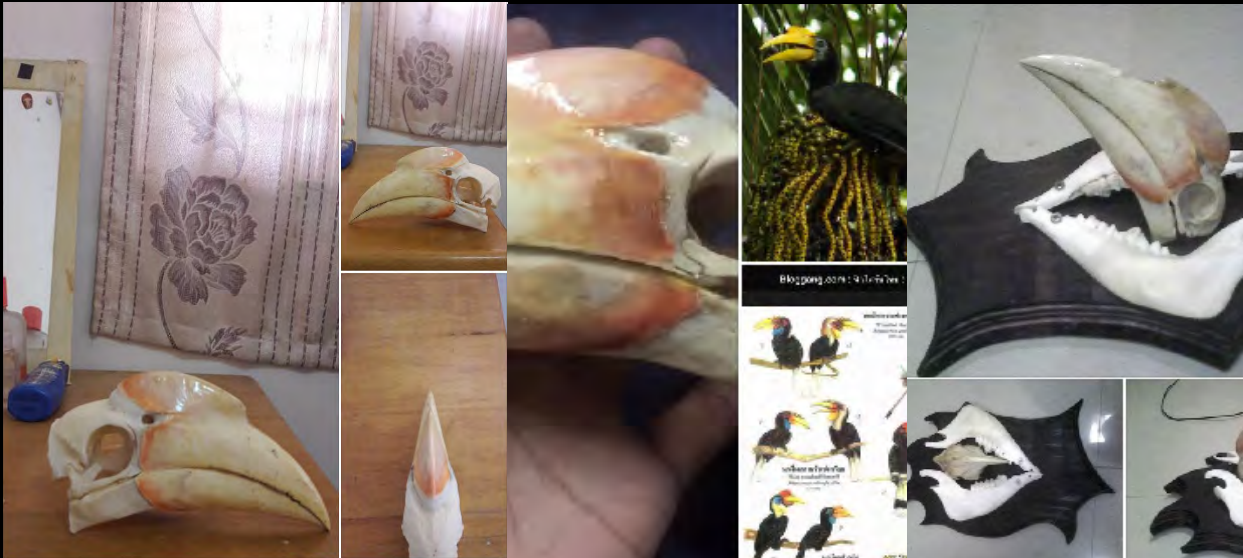
RHINOCEROS HORNBILL *BUCEROS RHINOCEROS*



ORIENTAL-PIED HORNBILL *ANTHRACOCEROS ALBIROSTRIS*



WREATHED HORNBILL *RHYTICEROS SUBRUFICOLLIS*



WRINKLED HORNBILL *RHYTTICEROS UNDULATES*



BUSHY-CRESTED HORNBILL *ANORRHINUS GALERITUS*



PLAIN-POUCHED HORNBILL *RHYTTICEROS UNDULATES*

\*\*\* ก่อนกดประมวลข้อมูลให้ครบถ้วนไม่พร้อมโอนอย่าเพิ่งเคาะนะจ๊ะ  
 \*\*\* ประมวลรวมมิตรหลายชิ้นหลายราชการ นักเงือกกรมช่างป่ากรีซ /  
 เค้าญี่ปุ่นตัวน้อย 2 ตัว / ตะพาบหลังดุง / ทอยวงช้าง หมดนี้ เริ่มที่ 800  
 เค้าจีนตัว 100 ค่าส่ง 50 บาท ปิดประมวล 20.30 น. ส่วนหนึ่งเลี้ยงแล้วตาย  
 แล้วเองราคาเป็นๆไม่ต้องหุดถึงแพงมาก งานสะอาดไม่มีกลิ่น \*\*\* ผู้ชนะ  
 พร้อม โอนวันรุ่งขึ้นทันทีเคาะเล่นประจានะจ๊ะ อีอิี \*\*\*



+4



WHITE-CROWNED HORNBILL BERENICORNIS COMATUS

During the survey, there were some fake hornbill items made of resin (a) and (b), and one sale posts of hornbill feathers (c) shown below:



(a)



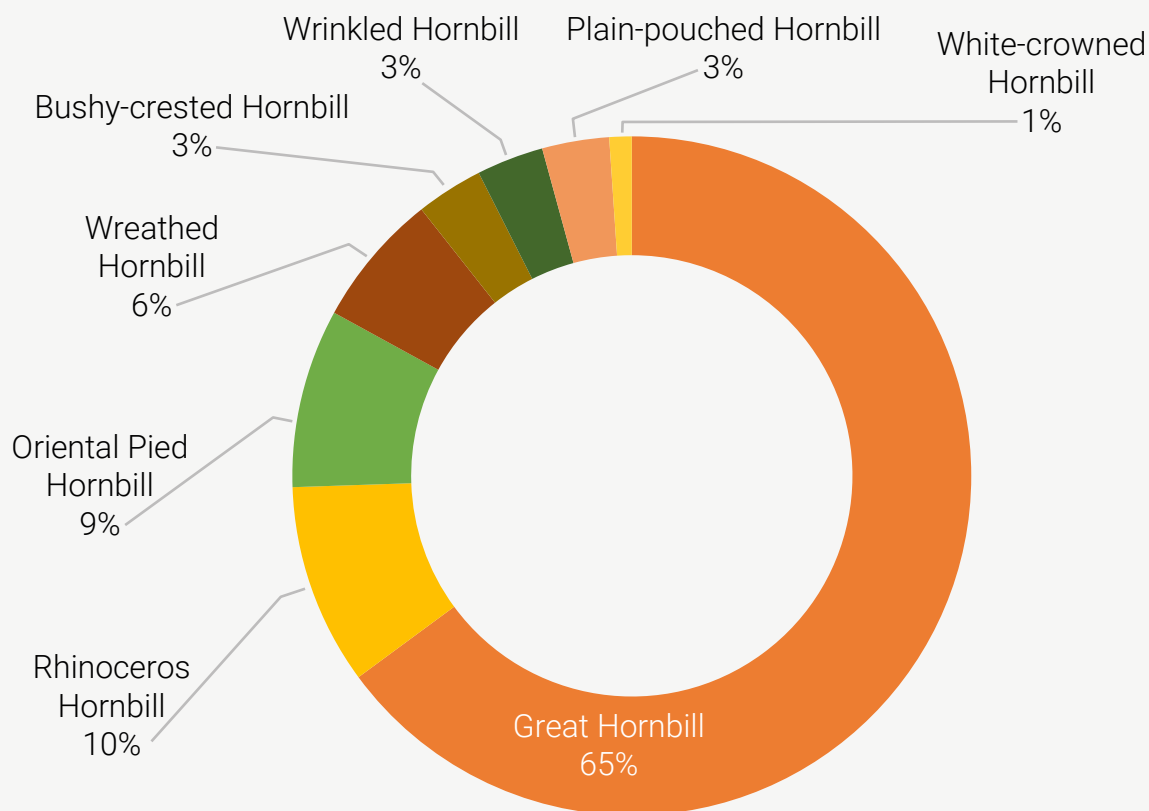
(b)



(c)



A total of 94 items from eight other hornbill species were also recorded from 63 sale posts during the survey (Table/Figure 4)—all are native to Thailand. In all cases, whole heads were offered for sale. Great Hornbill *Buceros bicornis* formed the majority (61 items; 66%) (Figure 4).












SPECIES	NO. OF ITEMS	NO. OF SALE POSTS
Great Hornbill <i>Berenicornis comatus</i>	61	38
Rhinoceros Hornbill <i>Buceros rhinoceros</i>	9	7
Oriental Pied Hornbill <i>Anthracoceros albirostris</i>	8	6
Wreathed Hornbill <i>Rhyticeros undulatus</i>	6	5
Bushy-crested Hornbill <i>Anorrhinus galeritus</i>	3	1
Wrinkled Hornbill <i>Aceros corrugatus</i>	3	3
Plain-pouched Hornbill <i>Rhyticeros subruficollis</i>	3	2
White-crowned Hornbill <i>Berenicornis comatus</i>	1	1
<b>TOTAL</b>	<b>94</b>	<b>63</b>

**Figure 4:** The proportion of other hornbill species (excluding Helmeted Hornbill) that were offered for sale recorded during the survey.

# PROTECTION STATUS

## NATIONAL AND INTERNATIONAL LEVEL

All nine hornbill species recorded in the survey are native to Thailand and protected by law in Thailand under WARPA, which makes any hornbill trade illegal in Thailand. Three of these species are listed in CITES Appendix I with the remaining in CITES Appendix II (Table 3). Outside of the Helmeted Hornbill which were recorded in the vast majority of the online posts (73%), the Great Hornbill was the second most popular species offered (Figure 6).

SPECIES	IUCN	CITES	NO. OF SALE POSTS	%
 HELMETED HORNBILL	Critically Endangered	Appendix I	173	<b>73%</b>
 GREATHORNBILL	Vulnerable	Appendix I	38	<b>16%</b>
 RHINOCEROSHORNBILL	Vulnerable	Appendix II	7	<b>3%</b>
 ORIENTALPIEDHORNBILL	Least Concern	Appendix II	6	<b>3%</b>
 WREATHEDHORNBILL	Vulnerable	Appendix II	5	<b>2%</b>
 PLAIN-POUCHEDHORNBILL	Vulnerable	Appendix I	2	<b>1%</b>
 BUSHY-CRESTEDHORNBILL	Near Threatened	Appendix II	1	<b>0.5%</b>
 WHITE-CROWNEDHORNBILL	Endangered	Appendix II	1	<b>0.5%</b>
 WRINKLEDHORNBILL	Endangered	Appendix II	3	<b>1%</b>

**Table 3:** Summary of protection status by national and international level

# PRICE

Price data were available in 48 of the 173 posts offering Helmeted Hornbills. The highest priced item was a necklace with ivory and casque pendant (~USD730) (Table 4).

	PRICE RANK (THB – THAI BAHT)		PRICE RANK (USD – US DOLLAR)	
	WORKED	RAW	WORKED	RAW
<b>Pieces</b>				
Casque pieces	350–2,450	N/A	11.35–207	N/A
Casque shavings (estimated)	160	N/A	5.18	N/A
Beak tips	N/A	550–3,000	N/A	17.83–97.30
<b>Rings</b>				
Casque	450–9,000	N/A	14.59–291.92	N/A
Beak tip	3,000–4,900	N/A	97.30–158.93	N/A
Casque with tiger teeth	3,000	N/A	97.30	N/A
Casque with tiger claw	3,700	N/A	120	N/A
Casque with ivory	950	N/A	30.81	N/A
Beak tip with ivory	7,350	N/A	238.40	N/A
<b>Pendants</b>				
Carved pendant	9,800–20,000	N/A	317.87–648.71	N/A
Pendant with tiger teeth	5,000	N/A	162.17	N/A
Pendant with tiger claw	4,000	N/A	129.74	N/A
Casques	4,500–5,555	5,999–15,000	145.96–180.18	194.58–486.53
<b>Necklaces</b>				
Necklace with casque pendant	20,000	N/A	648.71	N/A
Necklace with ivory and casque pendant	22,500	N/A	729.80	N/A

**Table 4:** Range of advertised prices of Helmeted Hornbill parts and products

SPECIES	NO. OF ITEMS	NO. OF SALE POSTS
Great Hornbill	450–2,700	14.64–87.85
Oriental Pied Hornbill	450–1,600	14.64–52.05
Wreathed Hornbill	1,000–2,000	32.53–65.00
Bushy-crested Hornbill	2,000	65.00
Wrinkled Hornbill	1,500–1,800	48.80–58.56

**Table 5:** Price data for other hornbills (whole head)

# FACEBOOK GROUPS



A total of 337,919 individuals were members of the 32 Facebook groups monitored at the end of April 2019. It is unknown how much overlap there was between groups. Group size ranged from 313 to 43,592 members. On the last month of the survey, one public Facebook group was deleted, but it is unknown if this group's privacy setting was changed to closed or secret (therefore preventing researchers from having access) or if members joined other groups. While the eight other groups that were monitored did not offer hornbill products, other wildlife items were offered instead, including examples purporting to be elephant ivory, tiger teeth and claws, bear claws and guitarfish bones.

## UPDATE AS AT AUGUST 2019

The trade has either reduced or gone underground: 35 of the 40 groups appear to have been removed. This may have been, in part at least, due to action taken by Facebook to remove the posts after TRAFFIC shared the survey data with them. TRAFFIC have also noted that when law enforcement action is taken, or when posts removed by Facebook, sellers tend to keep a low profile by either shutting down pages or not offering prohibited wildlife, parts or products for sale. Nonetheless, three new posts from June to August, offering four Helmeted Hornbill parts and products, were found in one of the remaining five groups in August 2019. Further research and investigations in these and other groups would be important to continue monitoring and ascertain the status of the online trade in Helmeted and other hornbills in Thailand.

## SELLER'S LOCATION

The data show that the online hornbill trade in parts and products in Thailand is distributed across several sellers who generally only offer a small number of products. Location information was available for 63% of the posts, of which most appeared to be hosted in the central region of Thailand (Figure 6). This is unsurprising as Bangkok, the capital and commercial centre of the country, is located in this region. There were two traders posting from outside Thailand, one from Malaysia and the other from Cambodia, reaching out to the Thai market from neighbouring countries.



Although there was one post stating that the advertised Helmeted Hornbill casque piece was from Malaysia, it could not be determined from the study if most of the Helmeted Hornbill casques were sourced from within Thailand or from other range States. Some of the sellers claimed to have carved the item themselves, but again the origin of the casque was not stated. Helmeted Hornbill poaching hotspots appeared to be concentrated in Indonesia (Sumatra and Kalimantan), but populations in other range states are suspected to be targeted too as Indonesian populations dwindle (Beastall *et al.*, 2016; Jain *et al.*, 2018). Although there is no known evidence of organized poaching targeting populations in Thailand, the market for Helmeted Hornbill parts and products within the country warrants increased vigilance.

COUNTRY	REGION AND PROVINCE	NO. OF SALE POSTS	No. of Items offered
THAILAND	Central	78	116
	Northern	4	54
	North-eastern	7	7
	Southern	21	32
	Eastern	8	13
	Western	2	2
MALAYSIA	Penang	27	34
CAMBODIA	South-western -Sihanoukville Province	1	1
UNKNOWN COUNTRY	Unknown Region	88	287

**Table 6:** Location in which all hornbill products were found offered for sale based on sellers' profile location

## CITES TRADE

A search for records in the CITES Trade Database from 1976 to 2018 was also carried out to determine if Thailand had imported any hornbills. Using both importer- and exporter-reported quantities, a total of five live individuals of Oriental Pied, Wreathed and Great Hornbills for personal, travelling exhibition and zoological purposes were imported by Thailand. An additional six live Blyth's Hornbills, endemic to Indonesia and Papua New Guinea and not recorded in this study, were imported by Thailand for commercial trade. It is therefore unlikely that any of the items recorded were legally imported into the country.

# SEIZURES OF HORNBILLS IN THAILAND

Based on seizure reports collected by TRAFFIC from open sources from 2000 to July 2019, there were 19 seizures that took place in Thailand involving at least 75 individual hornbills (74 live and one head) of at least eight species (Annex 1). Oriental Pied Hornbills and Great Hornbills were the most frequently seized, with 17 and 15 individuals respectively, and 14 were not identified to species level. Eight of the incidents resulted in confiscations, while six resulted in arrests as well, although there was no information on any prosecutions or penalties. Five of the cases involved online traders, reinforcing the active nature of the trade in hornbills taking place online.

Most of the seizures involved live hornbills, which were sold or kept as pets or for display. There was no evidence of international trade in the seizures; details suggested that any movement of the hornbills was within Thailand across different provinces. Although, there was one case of an unknown hornbill being seized at the Thai-Lao PDR Border Market in Rattana-wapi, Nong Khai. While 11 cases resulted in confiscations, only six cases resulted in an arrest; no information on prosecutions or penalties were publicly available.

There were two incidents involving Helmeted Hornbills in 2016 and 2017. On 13th December 2016, officials at Hat Yai International Airport Wildlife Checkpoint seized a head of a Helmeted Hornbill from a package posted by an anonymous sender to an address in Bangkok (ASEAN-WEN, 2016).



On 30th June 2017, officials arrested three suspects for selling protected wildlife on Facebook, including an unknown number of Helmeted Hornbill and Rhinoceros Hornbill heads.

They were all thought to have been poached from Hala Bala National Park in Yala province, Southern Thailand (ThaiPBS, 2017; GreenNews, 2017).





# **CONCLUSIONS AND RECOMMENDATIONS**

Despite the dearth of observations of Helmeted Hornbill parts and products for sale in physical shops in Thailand, records of 452 Helmeted Hornbill commodities between 2014 and 2019, ranging from casque shavings to worked and raw whole casques to jewellery including mixtures with protected wildlife such as elephant ivory and tiger claws, this research shows that the online marketplace is where activity is taking place. Furthermore, an esoteric demand for hornbill heads was recorded, based on the sale posts of 94 whole heads of eight other Thai species. There appeared to be a dip in the trade in the most recent period (with surveys in 2019 only until April and not the full year), but it is unclear if this is a result of a shifting pattern of trade activity and demand away from hornbill parts and products, or a result of traders moving to new groups or platforms that are more difficult to detect, or other reasons.

This survey is a timely reminder that hornbill trade persists in Thailand. Most hornbill species are naturally uncommon, with many listed as threatened on the IUCN Red List. The closure of at least two groups during the time of the monitoring also reiterates the difficulty in monitoring and regulating the illegal wildlife trade online. Although Thai authorities have successfully carried out enforcement action in at least five online trading cases involving hornbills, there is clearly much more activity taking place, and one that requires more active and comprehensive monitoring and law enforcement action. With this in mind, TRAFFIC makes the following recommendations.

## LAW ENFORCEMENT

Law enforcement efforts are critical in ending illegal trade. In April 2017, the Thai government established a dedicated taskforce under the Department of National Parks, Wildlife and Plant Conservation (DNP), locally known as “Yiaw Dong” or the Wild Hawk Unit.

The Unit is authorised to search, seize and arrest individuals linked to illegal possession and trade of wildlife in Thailand. Thailand’s primary wildlife protection legislation, WARPA, has also recently been updated and comes into force on 20th November 2019 with stronger penalties against those who violate the law. Any effort to provide law enforcement support should therefore be done in co-ordination with the Wild Hawk Unit. Increased vigilance is also recommended to protect Thailand’s hornbill populations, particularly Helmeted Hornbills, against poaching. Further, as cross-border trade was implied by this research, multilateral collaboration with implicated countries should take place to identify the dynamics of this trade for necessary action.



## THAI AUTHORITIES AND FACEBOOK

Thai authorities and Facebook are encouraged to establish a close working relationship and develop joint strategies to tackle this problem. As part of Facebook's continued efforts with the TRAFFIC-, WWF-, and IFAW-facilitated Coalition to End Wildlife Trafficking Online, Facebook introduced a policy in April 2019 to ban the trade of all live animals on their platform from non-verified physical businesses, as well as all endangered species and their products across the platform. This is already a positive first step in tackling this problem, with the company taking leadership in prohibiting such activities by providing TRAFFIC- and WWF-developed training to its global trust and safety staff on how to identify illegal wildlife products on their platform. Facebook has also committed to taking down posts that are in violation of their standards, which to some extent serves to reduce the chances of purchasing such items. But like any crime, those flouting the law will explore opportunities and chances to continue their activity in less-detectable groups, as well as other platforms. Only with rigorous and continued monitoring, investigations and strong convictions for those found engaging in criminal activity can the scale of this trade be reduced over time.



## REPORTING WILDLIFE CRIME

Importantly, the public should continue to be encouraged to report wildlife crime, given the ease of gaining membership and access to groups that trade wildlife illegally. Please see page 3.

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# ANNEX

YEAR	NUMBER OF SEIZURES	HORNBILL SPECIES INVOLVED IN SEIZURES	NO. OF INDIVIDUALS	TOTAL PER YEAR
2013	2	Unidentified hornbill	3	3
2015	3	Oriental Pied Hornbill	13	39
		Great Hornbill	8	
		Wreathed Hornbill	5	
		Rhinoceros Hornbill	4	
		Tickell's Brown Hornbill* ( <i>Anorrhinus tickelli</i> ; not recorded in survey)	3	
		Unidentified hornbill	3	
		White-crowned Hornbill	3	
	2016	7	Unidentified hornbill	8
		Oriental Pied Hornbill	2	
		White-crowned Hornbill	2	
		Great Hornbill	2	
		Rhinoceros Hornbill	2	
		Tickell's Brown Hornbill	1	
		Helmeted Hornbill	1	
2017	3	Helmeted Hornbill	unknown	4
		Bushy-crested Hornbill	1	
		Oriental Pied Hornbill	1	
		Rhinoceros Hornbill	1	
		Wreathed Hornbill	1	
2018	2	Great Hornbill	5	5
2019	2	Oriental Pied Hornbill	1	6
		Rhinoceros Hornbill	5	



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