To skin a cat: how organised crime capitalises and exploits captive tiger facilities

November 2022
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Executive summary

Over the last century, the wild tiger population has decreased to alarmingly low levels. While tigers are adversely affected by climate change, habitat loss, human-wildlife conflict and loss of prey, the illegal tiger trade is said to be the most imminent threat.¹

Tigers are classified as a CITES Appendix I species, yet despite this, the world’s biggest cat is being trafficked to meet an unrelenting demand, particularly in some parts of Asia, for traditional medicine, wine and tonics, jewellery, décor, and pets. No part is wasted; as a result of the butchering process, their bones are boiled down to a paste, their skin is treated and hung up to dry, and their teeth and claws are extracted and polished.

For six years, the Wildlife Justice Commission has been investigating tiger-related crime in the Greater Mekong Subregion under Operation Ambush. During this time, Operation Ambush has identified numerous organised crime networks that supply the entire spectrum of illegal tiger trade, ranging from canines and claws to skin, bones, and whole, live tigers. While poaching of wild tigers remains a significant concern, intelligence and evidence collected under Operation Ambush suggests that tiger farms in the Greater Mekong region, especially in Lao PDR, Thailand and Vietnam, also present a significant threat to the survival of tigers across Southeast Asia. While some claim that captive tiger breeding facilities promote and encourage conservation, the Wildlife Justice Commission’s findings suggest the opposite; the safety and preservation they espouse to provide is merely a façade that perpetuates the supply and demand for the illegal tiger trade run by organised crime networks.

¹ https://www.worldwildlife.org/species/tiger
Organised crime networks operating in Lao PDR, Thailand and Vietnam are central to supplying the demands of the illegal tiger trade throughout Southeast Asia; they appear to use Lao PDR as a hub to launder tigers and their parts. Analysis suggests that Lao PDR and Thailand are the primary source for live tiger cubs destined for the pet trade in Thailand. Farms in Lao PDR also appear to cater to Vietnamese and Chinese clients. Vietnamese organised crime networks, while maintaining their own farms, appear to regularly import live and dead tigers from counterparts in Lao PDR and Thailand. Clients of Vietnamese farms tend to be wealthy Vietnamese and Chinese businessmen who prefer to hand-pick tigers for slaughter prior to observing the butchering process. Intelligence suggests that organised crime groups have several slaughter and storage facilities in Ha Tinh and Hanoi, while using Mong Cai as an exit point for delivery to China. Corruption continues to facilitate all facets of the trade, including moving product through the supply chain, border control, and access to politically exposed persons (PEPs).

Overall, there is reason to be hopeful. Some countries that have been heavily affected by the illegal tiger trade have made great strides in their efforts to detect, disrupt and prevent crime through policy and enforcement improvements, thereby leading to increased seizures, arrests and charges. Several countries are also committing to forward-thinking strategies like the application of DNA testing to identify farmed tigers and prevent them from entering the illegal trade.

The threat from transnational organised crime in the region with respect to tiger trafficking has not yet been fully documented. Going forward, this needs to be further explored. For example, intelligence and open sources suggest that Myanmar appears to be an emerging threat to the illegal wildlife trade, including tigers.²

Lastly, the illegal tiger trade continues to be enabled by a lack of domestic policies on non-native species, such as ligers, and by a tolerance for captive breeding facilities and commercial trade. Moreover, Operation Ambush is simply one piece of the puzzle. Significant intelligence gaps remain that can only be closed by sharing intelligence, working collaboratively across jurisdictions, and maintaining a steadfast commitment to ending the illegal tiger trade.

For that reason, the Wildlife Justice Commission suggests the following recommendations for law enforcement and policy makers:

- **Align domestic policy and legal frameworks** with current CITES Resolutions and Decisions on Asian big cat species, including (but not limited to) regular and timely audits on all captive tiger facilities – especially those that are privately-owned – in order to limit the criminal diversion of captive tigers to the illegal trade;

- **In countries that operate on a licensing system** for captive tigers, establish a national database in which DNA samples are recorded for each captive tiger to assist in determining the origin of seized tigers and their parts;

- **Support the use of innovative tools** in identifying seized tigers and their parts, such as Environmental Investigation Agency’s stripe-pattern database;

- **Undertake stronger enforcement activities** such as significant fines or forced closures when captive tiger facilities are found to be non-compliant;

- **Deliver stricter penalties** for individuals who engage in the illegal tiger trade;

- **Consider the legal status** of ligers given the crossover with the illegal tiger trade as demonstrated in this report and that of other hybrid big cat species given that wildlife traffickers are known to diversify;

- **Consider the ramifications of the lion bone trade** on the global illegal tiger trade, given that transnational organised crime networks have exploited this as a conduit to do business between Africa and Southeast Asia;

- **Consider changes to domestic policy**, such as the use of labelling laws, to ensure protection for all CITES-listed species regardless of whether they are non-native to a jurisdiction;

- **Place more emphasis on combatting the illegal tiger trade** at the regional level by providing resources to the jurisdictions that need it most, such as law enforcement and border control, and financial crime and technological expertise;

- **Improved collaboration** for sharing of intelligence; and,

- **Create a comprehensive and viable plan** for captive tigers from current captive facilities in Lao PDR, Thailand and Vietnam, that will cease operations. Among others, this plan would address the logistics of transferring captive tigers to appropriate sanctuaries that most emanate a tiger’s natural habitat and environment and could consider issues related to potential financial compensation to owners of captive facilities to offset lost income.

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Revered for their courage, tenacity and wisdom, tigers are natural-born leaders that symbolise royalty; one not to be underestimated, nor challenged. Yet, despite their inspirational qualities, the tiger’s chance of survival continues to be grim. Today, the International Union for Conservation of Nature (IUCN)’s Red List of Threatened Species estimates that between 3,726 to 5,578 wild tigers remain. While the population has increased 40% since the last assessment in 2016 due to improvements in population monitoring, the overall wild tiger population is down from 100,000 at the beginning of the last century. As a result, the tiger is listed as endangered by the IUCN.

Although the international trade in tigers has been prohibited since 1975 when they were classified as an Appendix I species under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), tigers continue to be bred in legal and illegal captive facilities – otherwise known as tiger farms. In 2020, the Environmental Investigation Agency (EIA) estimated that Asia was home to 8,000 captive tigers, with 306 facilities in China, Lao PDR, Thailand and Vietnam. Furthermore, analysis conducted by TRAFFIC revealed that 50% of tigers seized from the illegal trade in 2018 and 2019 were confirmed or suspected to have originated from captive sources.

This report closely examines the role of such facilities in a problem-specific manner and seeks to define the nature of the threat that farms pose in terms of enabling tiger-related crime in Southeast Asia. Ultimately, this report identifies the need for greater collaboration and coordination among law enforcement agencies to meaningfully tackle this problem going forward.
Methodology

Scope

Whilst it is acknowledged that captive tiger facilities exist in China, they were not the subject of Operation Ambush. Instead, the operational and intelligence-led focus of the investigation remained on the Greater Mekong Subregional countries of Lao PDR, Thailand and Vietnam.

Investigations and intelligence

Sanitised intelligence and findings from the Wildlife Justice Commission’s investigations are interwoven throughout this report to provide context and insights into the known criminal dynamics of the illegal tiger trade. The Wildlife Justice Commission’s investigation approach is modelled on recognised and proven law enforcement methodology. It uses a combination of undercover operatives, covert surveillance, and networks of trusted informants to collect intelligence and evidence across the supply chain, from source to destination.

A team of criminal intelligence analysts analyse data and information to guide the work of the undercover investigators to infiltrate trafficking networks and gather evidence, and the information they unearth feeds back into the intelligence cycle. Where possible, all intelligence is verified and corroborated to ensure it is as robust and accurate as possible, and it is documented to an evidentiary standard. This rigorous approach means the Wildlife Justice Commission can support law enforcement agencies to build solid cases for prosecution and it is willing and able to testify in court on the strength of the evidence it collects.
Price data analysis

The ‘Pricing’ section in this report reflects black market prices collected between July 2016 and July 2022 for the following products: adult tigers per unit and per kg; skin, canines and whiskers per unit; products such as jewellery and tiger bone wine per unit; and, bones and tiger glue/bone paste per kg. The data were gathered by Wildlife Justice Commission operatives during undercover dealings with farm owners, traffickers and brokers in Cambodia, Indonesia, Lao PDR, Malaysia, Thailand, and Vietnam. All prices were converted to USD to make them comparable across the supply chain.

When interpreting price data, it is important to note that wholesale prices can fluctuate depending on who is selling the tiger, part or product (i.e. their role in the criminal network and how close they are to the source of the product) and the quantity being negotiated. Other factors that contribute to wholesale prices include transportation costs, facilitation payments, law enforcement risk, and supply and demand dynamics. The Wildlife Justice Commission targets its investigations at subjects who are assessed as being mid- to high-level criminals, and investigators always negotiate prices to ensure as far as possible that the final price offered reflects current street values.

Note on referencing

A substantial portion of the information and analysis provided in this report is based on six years’ worth of intelligence and findings from Wildlife Justice Commission investigations. Where information is drawn from any other source, it is referenced with footnotes and acknowledged as such. Any non-referenced information, inferences or interpretation should be understood as being sourced from Wildlife Justice Commission intelligence analysis.
The criminal supply chain

High-level overview

At the heart of the investigation was the role of captive tiger facilities located in Lao PDR, Thailand and Vietnam and the criminal elements that were linked to these establishments. As shown in Table 1, the Wildlife Justice Commission visited multiple tiger farms which enabled the gathering of intelligence and the documentation of this associated criminality.

<table>
<thead>
<tr>
<th>Country</th>
<th>Province(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lao PDR</td>
<td>Bolikhamsai, Khammouane</td>
</tr>
<tr>
<td>Thailand</td>
<td>Chachoengsao</td>
</tr>
<tr>
<td>Vietnam</td>
<td>Nghe An</td>
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</tbody>
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Table 1: Tiger farms visited by Wildlife Justice Commission according to country and province (2016-2022).

Organised crime groups in Lao PDR, Thailand and Vietnam are central to supplying the demands of the illegal tiger trade in Southeast Asia. In particular, they appear to use Lao PDR as the primary hub to launder tigers and their parts. Overall, organised crime groups in all three countries are dependent on each other and conduct regular transactions in order to maintain an efficient supply of tigers and parts in the Greater Mekong Subregion, which also extends beyond these three countries of focus.

While the media has focused on the criminal diversion of tigers from zoos or entertainment centres (such as the Tiger Temple), the Wildlife Justice Commission found a significant threat also derives from privately-owned farms that are not accessible to the public. The farms are usually located in close proximity to the owner’s home, if not on the same property. Access to these farms is not easy to obtain, as many traffickers expressed caution and are conscious of the law. That being said, captive tiger traffickers are fairly close-knit and support each other by sharing potential clients and providing access to supply. Overall, they work hard to ensure that the illegal tiger trade in its entirety runs smoothly.

For example, they ship tigers, bones, canines and jewellery from Lao PDR to China, while also using Lao PDR as a conduit to receive tigers from Malaysia and Myanmar. Hybrid traffickers – those who traffic in both wild and farmed tigers – have also implicated Thailand as a source for both wild and farmed tigers, especially cubs, that are destined for Bangladesh, Lao PDR and Vietnam. Intelligence indicates that organised crime groups operating in Indonesia and Myanmar may also be supplying Thailand with wild tigers.

Although China has its own tiger farms, Operation Ambush has demonstrated that it is well-serviced in tigers, parts and products by organised crime groups in Cambodia, Lao PDR and Vietnam. While Vietnam’s illegal trade is generally supplied by tigers and parts from Thailand and Lao PDR and underground tiger farms in Vietnam, it is also supported by skins, bones and canines from Vietnamese-owned South African farms.

A high-level overview of the supply chain is illustrated in Chart 1.

In Lao PDR, the Wildlife Justice Commission intelligence indicates that at least four legal breeding facilities are known to engage in tiger trafficking and there are several examples of the insidious influence organised criminality plays in respect of these facilities:

- Many locals feared discussing the details of the local tiger farms due to possible retaliation from organised crime. Laotian tiger farms are suspected to be owned by a small number of well-connected, transnational traffickers.

- A Laotian national suspected to own three farms and several trading companies, is also heavily connected to the illegal rhino horn trade in Africa.

- In addition, the illegal wildlife trade – especially with respect to tigers – is known to occur within the Golden Triangle Special Economic Zone (GTSEZ) leased by Chinese national and US-declared Transnational Criminal Organisation, Zhao Wei.¹¹

Meanwhile, there are greater concerns in terms of the role these facilities play in the region. Situated between Thailand and Vietnam, Lao PDR is a

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¹¹ Treasury Sanctions the Zhao Wei Transnational Criminal Organization | U.S. Department of the Treasury.
convenient transit hub for illegal tiger trafficking between the two countries. It is recognised that at least some of the tigers held in Lao PDR facilities are being supplied by farms in Thailand but more investment needs to be made to determine the nature and scope of this threat. Furthermore, criminal networks appear to be involved in the illegal trade of tiger parts between Thailand and Lao PDR.

Wildlife Justice Commission intelligence indicates that captive facilities in Lao PDR are breeding tigers for export to clients in China and Vietnam. One farm identifying as a zoo thrived on hosting organised tour groups from China and Vietnam, often for weeks at a time. Otherwise, the farm was quiet and devoid of regular visitors.

Organised crime groups operating Laotian tiger farms typically sell whole tigers as opposed to parts. Live tigers observed at Laotian facilities ranged anywhere from 30 to 300 in number, kept in small, chain-link enclosures. However, one farm offered the opportunity to purchase whiskers and canines directly from the farm owner, indicating that some butchering must take place on site. Another investigation revealed that bones could also be shipped from Luang Prabang and Vientiane to China.

Dead cubs could also be purchased but could not be delivered outside of the country. Another farm imported tigers, both dead and alive, from organised crime groups operating in Malaysia, Myanmar, Thailand and Vietnam to further support its breeding program and trafficking of whole, dead tigers.
In 2019, the Wildlife Justice Commission visited a well-known Laotian farm in Bolikhamsai province, located between Vientiane and Lak Sao:

Local villagers openly referred to it as the ‘tiger resort’. It was open to the public with the purchase of an entry ticket at the gate. Prior enquiries at the Lak Sao Market indicated that tigers are bred at this facility. One of the owners is a major wildlife trafficker who is wanted by authorities in a neighbouring country for rhino horn trafficking.

At the time of the visit, the resort was extremely quiet. It was found to host a zoo area holding 30 live adult tigers, two bears and three monkeys. Laotian staff members at the resort claimed that the main clientele was organised tour groups from China and Vietnam who usually stayed for several weeks at a time. Although no tiger cubs were observed during the visit, a staff member later disclosed they could supply dead tiger cubs but would not deliver outside of Lao PDR.

Undercover investigators established contact with a Laotian national and zookeeper at the farm. The target agreed to sell ten dead tiger cubs (5 sets of 2) for a total of THB 80,000 (approximately USD 2,460), which included delivery to Vientiane. The target shared a video and images of the ten cubs proving his ability to access the products. Further negotiations led to the price being increased to THB 150,000 (approximately USD 4,615) due to a perceived risk from the seller. This final price was agreed, and the target proceeded to arrange delivery of the cubs.
Thailand

Thailand operates on a licensing system but only to facilities classified as zoos, which are largely entertainment facilities providing interactions with tigers. With a licence, it is legal to possess, trade and transport live tigers domestically. Thailand has been grappling with its troublesome history involving captive tigers, especially since the 2016 raid of the notorious Tiger Temple. However, Thailand was praised internationally when it made sweeping changes to its Wildlife Conservation and Protection Act BE 2562 (WARPA) in 2019 that saw a considerable increase in fines and imprisonment terms for illegal possession and trade of CITES species.

Thailand also has private farms run by organised crime groups that appear to be catering to the live tiger trade, especially in cubs. Cubs appear to be sourced primarily from within Thailand, particularly in Ratchaburi and Chachoengsao provinces, and often destined for clients in Thailand. However, a farm in Lao PDR was also implicated as a source for cubs, as illustrated in the case study involving ‘Nong Kwan.’ This further corroborates the inference that organised crime groups use Lao PDR as a laundering hub in Southeast Asia for tigers and their parts.

Wildlife Justice Commission intelligence suggests that private tiger farms in Thailand are cautious and do not typically allow in-person viewing of tiger cubs prior to purchase. Instead, photos and videos of cubs are shared via social media apps like Facebook Messenger and Line. However, the available stock of tiger cubs in Thailand seems to be constantly in flux, which means the client may not receive the same cub as previously communicated.

Some farms trafficking in cubs are suspected to have Thai brokers, who are easily linked by sharing the same photos of cub stock on social media platforms such as Facebook. In one example, a suspected broker also operated a series of pet stores in the Bangkok region.

It is the Wildlife Justice Commission’s observation that tiger cubs in Southeast Asia are typically destined for the pet trade. However, it is important to remember that this may not be the case in other regions. According to Wildlife Justice Commission intelligence, cubs that are destined for the pet trade are generally well-cared for; they are bottle-fed and handled by multiple people. While they do have caged enclosures, they are also permitted to roam the premises. For the most part, farmed tiger cubs are domesticated and socialised to humans. On the other hand, wild tiger cubs will be visibly fearful and may show outward aggression. Tigers usually reach their full height and length by the time they reach three years of age. For most, housing and maintaining a pet of that size becomes unsustainable. While it has not yet been observed by the Wildlife Justice Commission, it is suspected that unwanted adult tigers will re-enter the illegal trade for breeding purposes or to be slaughtered for parts and products.

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Thai authorities rescue Siberian tiger cub “Nong Kwan” from the illegal trade

The following case study illustrates how a tiger cub sourced from a Laotian farm made its way into Thailand’s illegal trade.

It was early evening on 5 April 2022, when the parking lot of the Central Westgate Mall in Nonthaburi province was suddenly filled with officers from the Royal Thai Police’s Natural Resources and Environmental Crime Suppression Division (NED) and Thailand’s Department of National Parks, Wildlife and Plant Conservation (DNP). Supported by the Wildlife Justice Commission, it was the culmination of several months of undercover investigation by Thai authorities into a network of transnational wildlife traffickers. Three individuals were arrested at the scene in possession of a four-month-old tiger cub and charged for their involvement in the possession and trade of illegal wildlife.

The cub, now known as Nong Kwan, was seized and transferred into the care of the DNP. A DNA test revealed her to be a Siberian tiger. Given that Siberian tigers are not native to Thailand, it was determined that Nong Kwan was sourced from a tiger farm. Upon further investigation, the suspects revealed she was smuggled into Thailand from a farm in Lao PDR via an unmanned border crossing.

As a result of ‘following the money’, the DNP arrested four more individuals across Thailand on 22 June 2022, for their involvement in procuring Nong Kwan. As shown in Chart 2, Suspect 3 spoke with Suspect 4 about sourcing a tiger cub. Suspect 4 then spoke with Suspect 5, whom she knew could provide a cub, and ordered one for THB 240,000. Suspect 5 sourced the tiger from Suspect 6, who is the owner of a zoo in Suphan Buri province, for THB 170,000. Suspect 6 sourced the cub from Suspect 7. Suspect 5 asked his friend, Suspect 8, to collect the tiger from Suspect 6 and was paid THB 10,000, as a result.

Not only did Nong Kwan’s seizure save her from an uncertain future, it also disrupted an organised crime group’s ability to traffic dozens of other protected flora and fauna on a mass scale - including pangolins, ivory and rosewood - that were routinely offered to undercover investigators during the investigation. This case, which garnered international attention, was the result of meaningful collaboration with local authorities who are determined to bring justice to those who gamble on the illegal wildlife trade.

Nong Kwan, who quickly captured the heart of Thais, continues to mature into a healthy Siberian tiger at the Bueng Chawak Wildlife Sanctuary in Suphan Buri province.

Image 4: “Nong Kwan” moments after being rescued (April, 2022).

Image 5: “Nong Kwan” at Bueng Chawak Wildlife Sanctuary (September, 2022) (source: DNP, Facebook).
Chart 2: Case study - the procurement of “Nong Kwan”.

Suspect 1
Thailand

Suspect 2

April 5, 2022

Arrested

Suspect 3

STEP 2
Placed order for tiger cub from Suspect 4

STEP 3
Paid Suspect 5 THB 240,000 to source tiger cub

STEP 4
Paid Suspect 6 THB 170,000 for tiger cub

STEP 5
Acquired cub from Suspect 7

STEP 6
Paid THB 10,000 to collect tiger cub

STEP 7
Delivered tiger cub to Suspect 3

Suspect 4
Thailand

Suspect 8

June 22, 2022

Unknown zoo Suphan Buri province Thailand

STEP 1
Ordered tiger cub

Undercover investigator

“Nong Kwan”, Siberian tiger cub

Suspected origin
Lao PDR
Emerging concerns for the pet trade

**Leopard cubs** are also made available in Thailand by the same organised crime groups. While other products like skins and pendants are available, live leopard cubs appear to be more in demand for the pet trade. Between 2020 and 2022, the Wildlife Justice Commission was offered leopard cubs on six different occasions. In 2021, a suspect was arrested after selling a live leopard cub to undercover investigators. Over the span of the six-month investigation led by the Royal Thai Police’s Natural Resources and Environmental Crime Suppression Division (NED) and supported by the US Fish and Wildlife Service (USFWS) and the Wildlife Justice Commission, the suspect was identified as a high-level transnational trafficker with access to multiple CITES-listed species, including primates and other big cats such as cheetahs, panthers and jaguars. Intelligence indicated that the suspect owned farms in Malaysia and India and could facilitate delivery to Thailand.

![Image 6: Leopard cub sold to undercover investigators.](image)

**In addition**, the Wildlife Justice Commission received photos and videos of live tiger cubs in captive facilities, suggesting that they were not wild. With the exception of an offer for a tiger cub in Malaysia, Thailand was the primary source of cubs. However, the Wildlife Justice Commission is aware of at least one cub that was marketed as Thai, but was actually from a Laotian farm.

**The liger loophole**

As observed by the Wildlife Justice Commission, lion and liger cubs appear to be readily available in Thailand at the hands of organised crime. In addition to observing them on farms, the Wildlife Justice Commission was routinely offered them during investigations.

Ligers are the direct result of mating a male lion with a female tiger. This mating process only occurs within the confines of captive facilities, as wild lions and tigers do not share the same geographic range. CITES provisions are extended to hybrid species when a recent lineage derives from one or more species listed on Appendix I or II. This means that international commercial trade in ligers is prohibited. However, domestic laws governing the possession, trade and transportation of ligers are often lacking and inconsistent, particularly where laws do not provide protection for non-native species. This is particularly concerning, as ligers are not considered native to any country. In addition, the demand for ligers inherently creates demand from the big cat trade and further complicates law enforcement efforts.

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16. Lions (known as *Panthera leo*) are listed on CITES Appendix II. However, the Asian subspecies, *Panthera leo persica*, is listed as CITES Appendix I.
One mid-level tiger trafficking network was found to be actively advertising and selling liger cubs in Thailand. While no tigers were found onsite, the presence of a liger cub suggested the existence of another facility that housed and bred female tigers and male lions.

Vietnam

In Vietnam, it is illegal to possess, breed and transport tigers without a licence, which can only be issued to conservation facilities. In June 2022, almost 300 tigers in captivity were recorded at 17 farms and zoos. This is a considerable increase from 2010 when the country registered only 97 captive tigers.

The tiger farms in Nghe An province, are in the main, operated by organised crime groups who offer the full spectrum of breeding and selling live tigers to slaughtering them for their skin and bones. To fulfil the demand for breeding and sales of live tigers and their parts, intelligence indicates that Vietnamese organised crime groups also source their stock from other tiger farms in Lao PDR and Thailand.

Vietnamese tiger farms appear to operate in the shadows. Tigers tend to be hidden away in small, dark cages in separate rooms, basements, or buildings. In one example, the trafficker requested that phones be turned off in order to avoid GPS tracking.

Based on the Wildlife Justice Commission’s intelligence, farmed tigers are typically euthanised via lethal injection. One broker explained that they usually collapse within 30 minutes. However, one farm in Vietnam was known to use a method that involved the application of an electric shock rod to the neck, most likely chosen for its efficiency. As recounted by one trafficker, “…it takes around three minutes.”

“…it takes around three minutes…”
— TRAFFICKER EXPLAINING THE USE OF ELECTRIC RODS TO KILL CAPTIVE TIGERS.

Image 7: Tiger at a private farm in Vietnam.

17 https://env4wildlife.org/tigers/#:~:text=As%20of%20June%2C%202022,are%20in%20Vietnam
The tigers are then slaughtered and dismembered for every part and derivative; nothing is wasted. The skin, skeleton and bones, claws and canines are all highly marketable products. Tiger skin is readily available in Vietnam through organised crime groups. The Wildlife Justice Commission observed dozens of tiger pelts at slaughterhouses that were in the process of being chemically treated, dried or already rolled up for sale. The brightly coloured pelts were said to be sourced from farms in Lao PDR, while others were from farms in Thailand. Whole tigers stuffed with cotton were also available for purchase.

Tiger bone paste is also available on Vietnamese tiger farms, usually in 100 g bricks. For reference, our intelligence indicates that an average tiger weighing 200 kg can produce five to six bricks. Tiger bone paste, sometimes referred to as tiger glue, is the result of boiling down tiger bones for several days until they dissolve.

Once slaughtered and processed, their parts are often stored in Ha Tinh and Hanoi before being smuggled out of the country for the international market. Mong Cai appears to be an international exit point for tiger parts and products to China, along with many of high-value wildlife products in the region. In some cases, delivery of tiger pelts could be arranged directly to Shanghai, Dongxing and Pingxiang in China.

Clients of the illegal tiger trade in Vietnam tend to be wealthy Vietnamese and Chinese businessmen who often request to choose the tiger and witness the killing. Some clients are instructed to direct payments through Chinese bank account(s), likely in an effort to circumvent Vietnamese banking systems and evade detection. Organised crime networks are often well-versed in local anti-money laundering regulations and legislation and will go to great lengths to conceal the origin of the proceeds of crime.

An emerging threat: Myanmar

An unassessed threat that may be emerging sees Myanmar playing a key transit role in the movement of live, exotic animals for the pet trade, following multiple seizures of endangered exotic animals which have taken place recently in the Northeast of India, near the border with Myanmar. Traditionally, the state of Manipur has been the entry point for almost all land-based trade between India and Myanmar, including illegal goods and contraband, which usually enter the country via unofficial crossing points before being stored in strategically located towns such as Moreh, Kamjong and Behiang.
However, authorities suspect that smuggling networks operating in the region are now using the bordering-state of Mizoram as a new route (an alternative to the more conventional routes in Manipur) to smuggle animals to supply the growing and thriving exotic pet market in India.

In June 2020, Myanmar began to permit private zoos to apply for captive-breeding licences that could be applied to 90 species, including elephants, tigers, pangolins, and others, with almost one quarter (20 species) being categorised as either endangered or critically endangered in the wild, according to the IUCN.20 Concerns have already been raised regarding differences between the types of businesses that are permitted to harvest wildlife under these new rules, leading to a lack of clarity about quotas for harvesting. Little is currently understood about the purposes of such facilities and how they are being regulated.

Uncorroborated intelligence reports that Myanmar may have tiger farms. While this information is yet to be verified, it comes at a time following the recent legislative change permitting the captive-breeding of endangered species. The implication of such facilities is not yet fully understood, but it raises substantial concern given the repeated association between similar facilities in Thailand and Lao PDR and illegal tiger trade in the Greater Mekong region, as well as the identified cross-border tiger trafficking between China and Myanmar. For example, the Wildlife Justice Commission has intelligence to suggest that farms in Myanmar may be supplying some organised crime syndicates in Lao PDR, Thailand and Vietnam with tigers, especially cubs. Intelligence also suggests that Myanmar is being used as a laundering hub for cubs, where Thai-bred cubs were exported to Myanmar and then re-imported to Thailand in order to obfuscate the cub’s true origin.

Criminal dynamics

Opportunistic traffickers

While this report focuses predominantly on tiger farms, the threat from wild poaching cannot be dismissed. The Wildlife Justice Commission’s intelligence indicates that some traffickers operate on an opportunistic sourcing model that exploits both wild and farmed tigers.

Wild tigers continue to face poaching threats within their limited geographical range. According to one target, a trade route from Sumatra via Brunei was established in order to sell live, critically endangered Sumatran tigers to Thailand. This trade route was also known to smuggle the critically endangered helmeted hornbill and porcupine bezoars.21

In Thailand, a high-level trafficker appeared to cover a swath of central Thailand when it came to poaching connections. The target claimed to know hunters in Prachuap Khiri Khan province, specifically in the Pran Buri district, and knew smuggling routes in Thong Pha Phum district in Kanchanaburi province. As it turned out, the target is believed to be the head of a poaching network that was arrested in January 2022 after local Thai authorities

21 Calcified masses derived from the gastrointestinal tract of porcupines that are used in traditional medicine.
found two Bengal tiger pelts and tiger meat at a campsite in Thong Pha Phum National Park along the Thai-Myanmar border.\footnote{22 www.wildlifejustice.org}

A Vietnamese trafficker indicated that he poached wild tigers in Thailand. Typically, the tigers were killed immediately and then transported for storage in Ha Tinh province, Vietnam. However, he also offered the ability to transport live tigers poached from the wild from Thailand via Lao PDR to Ha Tinh. This allowed clients the ability to choose any tiger based on size and appearance, which clients seemed to prefer. Whether the clients preferred wild over farmed tigers is unknown; this represents an intelligence gap.

**Links to high-value commodities**

*Wildlife Justice Commission* intelligence indicates that mid- to high-level traffickers that deal in tigers, typically Vietnamese, are also trafficking in other CITES-listed species such as pangolins, rhino horn, and ivory. Live and frozen pangolins, in addition to scales, were available. Regarding rhino horn and elephant ivory, bracelets and pendants were most common. Not surprisingly, some traffickers indicated they were shifting away from ivory, likely due to increased risk from law enforcement and decreased consumer demand as a result of the ivory ban in China that took effect in 2017.\footnote{23 \url{https://www.worldwildlife.org/stories/a-monumental-win-for-elephants-china-will-ban-ivory-trade-by-2017}}

In 2017, the Wildlife Justice Commission became aware of a prolific trafficker operating out of Malaysia with access to air cargo at Kuala Lumpur International Airport. He indicated he could ship orangutans from Malaysia to the Middle East directly or via Bangladesh or India. The trafficker was also the owner of a pet shop that sold a variety of different animals and birds. During communication with undercover investigators, the trafficker indicated that he had exported three tiger cubs from Malaysia in homemade crates that were concealed in a central compartment surrounded by cages containing small birds.

\textbf{Image 9: Pangolin scales.}
A handful of mid- to high-level traffickers based in Thailand or Vietnam indicated they were interested in venturing into the illegal timber trade or already had access. In most cases, rosewood was the target. During a conversation with an undercover investigator regarding the potential purchase of a tiger cub, an unknown species of rosewood harvested from Lao PDR was also offered for sale. True rosewoods and their related species, of which there are approximately 250, fall under the genus *Dalbergia* and were classified as CITES Appendix II in 2017. Given that rosewood is most prized for its use in crafting luxury furniture, it is possible that home décor is one of the reasons these two illegal trades converge.

The convergence of these species suggests that it is not uncommon for tiger traffickers to diversify to other species. It is well known that mid- to high-level traffickers will deal in a variety of commodities in order to increase their profit.

South African tiger farms

Tigers are not a native species to South Africa. Despite this, South Africa maintains an active tiger farm trade that perpetuates the supply and demand for the global illegal tiger trade. Tigers are considered ‘alien species’ in South Africa, which makes it legal to farm, hunt and kill tigers. According to a report released by the NGO Four Paws in February 2022, 51 permits were issued between 2016 and 2021 to export live tigers or parts; with the live tigers exported to facilities classified as zoos in Vietnam, China and Bangladesh. It is also well-known within the intelligence community that tiger parts, such as bones, have been fraudulently declared as lion bones in order to facilitate international export from South Africa.

Operation Ambush identified several high-level traffickers who identified that they could source tiger products from South Africa. For example, in 2016, one trafficker indicated that 100 kg of tiger parts including skins and canines were shipped from South Africa to Vietnam, facilitated by corrupt customs officials at both ends of the supply chain. It is also worth noting that some tiger farms in South Africa are owned by Vietnamese targets.

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One species, *Dalbergia nigra*, is listed in CITES Appendix I.

25 Four Paws (2022), *Year of the tiger? Big cat farming in South Africa: the need for international action*.

26 Annually, South Africa can legally trade parts from 800 captive lions: [https://www.awf.org/news/lion-bone-trade-end-lions-roar](https://www.awf.org/news/lion-bone-trade-end-lions-roar)
Convergence with the illegal bear trade

**Depending on the species**, bears are classified as either CITES Appendix I or II. The Wildlife Justice Commission observed an overlap in Vietnam and Lao PDR between the illegal tiger trade and the illegal bear trade, involving a practice where bears are kept in small cages – usually for their entire lifespan – and endure regular bile extractions. Bear bile, known to be used in traditional medicine, was offered to the Wildlife Justice Commission in both dry and wet format.

[A mid-level wildlife trafficker](https://www.worldanimalprotection.org/news/hanoi-last-race-end-bear-bile-farming-vietnam-urgent-action-needed) in Vietnam who specialises in tigers continually offered bear products such as paws, bladders and bile, to the Wildlife Justice Commission. This trafficker, based in Ha Tinh, regularly travelled to Hanoi, which could explain the regular access to product. The prices offered to the Wildlife Justice Commission are consistent with farmed bear bile, which is known to be cheaper than its wild counterpart.

**In 2005**, Vietnam banned the extraction and sale of bear bile and later announced its commitment to closing remaining bear farms. Encouragingly, the number of farmed bears in Vietnam has dropped from 4,300 in 2005 to 294 in 2022, and 40 of 58 provinces are now devoid of bear farms. Hanoi is considered the last bear farm stronghold.

Given their size, disposition, and the similar infrastructure and maintenance required to operate a bear farm, it is not surprising to see the trades converge. In Lao PDR and Vietnam, caged bears were often observed by the Wildlife Justice Commission on farms and zoos. Bear products were also commonplace in shops.

**Corruption and fraud**

It has long been known that corruption is the lifeblood of wildlife crime. Illegal tiger trafficking is no exception. Unsurprisingly, throughout Operation Ambush, multiple farm owners and traffickers reported having friends or family members who acted as gatekeepers for police, customs, inspection agencies or supply chain access. Though few,

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27 The Asiatic black bear and the Malayan sun bear are both classified as CITES Appendix I and share some geographical range in Southeast Asia. According to the IUCN, both are listed as vulnerable.

politicians and law enforcement authorities were also implicated. Abuse of licences was observed where names appeared to be deliberately spelled incorrectly, likely to evade accountability and muddy the waters within the licensing system.

In one example, one of the biggest wildlife traffickers in the Greater Mekong Subregion alluded to knowing someone who would provide advance notice of a planned tiger farm inspection. As for the supply chain, the same trafficker indicated they “have people covered” and knew people who could “take care” of moving the product at the local airport. Another high-level trafficker stated that they had shipments cleared at multiple airports in both Africa and Asia.

The trafficker indicated that they “have people covered” and knew people who could “take care” of moving the product at the local airport.

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Law enforcement measures

Over the last decade – and in particular, the past few years – the international community and the media have applied sustained pressure on countries that allow tiger farms for commercial trade. There is an indication that this has resulted in some improvement of domestic regulation and legislation in countries such as Thailand, Vietnam, Lao PDR and China. Seizures, arrests and charges have also been observed, particularly in Thailand and Vietnam. For example, in May 2022, Vietnamese authorities in Nghe An province arrested four individuals for operating a tiger trading ring. In addition, they seized a 145 kg frozen tiger, 10 kg of tiger glue/bone paste, 5 kg of bones and six claws. This followed a major operation in May 2021 by Vietnamese authorities in Nghe An province whereby seven tiger cubs and 17 tigers were seized from two illegal breeding facilities. Thailand, for its part, seized another two tiger cubs in May 2022 right on the heels of seizing “Nong Kwan” in April 2022.

In addition, some countries are experimenting with, or have committed to, DNA testing in order to identify illegally farmed tigers and prevent them from entering the illegal trade. For example, 263 tissue samples and 42 DNA samples were recently taken during an audit of tiger facilities in Lao PDR. Furthermore, DNA testing conducted by the Thai government on seized tiger cub “Nong Kwan”

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demonstrated that she was a Siberian tiger. This finding solidified the suspicion that “Nong Kwan” was sourced from a tiger farm, as Siberian tigers are non-native to Thailand.

These examples show that some progress is being made in stronger management and enforcement of this industry.

The tiger value chain

Those engaging in tiger-related criminality are motivated by the monetary incentive it provides. An analysis of values, pricing structure and other variables has been undertaken to provide further insight on these drivers, which includes offers from brokers, traffickers and sellers operating in Cambodia, Indonesia, Lao PDR, Malaysia, Thailand, and Vietnam, ranging from 2016 to 2022.

An overview of the price ranges is outlined in Table 2.

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Price per unit (USD)</th>
<th>Price per kg (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult tigers</td>
<td>28,500 – 57,000</td>
<td>158 – 285 (unprocessed); 263 – 269 (processed)</td>
</tr>
<tr>
<td>Live cubs</td>
<td>7,648 – 17,500</td>
<td>-</td>
</tr>
<tr>
<td>Dead cubs</td>
<td>4,615</td>
<td>-</td>
</tr>
<tr>
<td>Skins</td>
<td>2,283 – 15,825</td>
<td>-</td>
</tr>
<tr>
<td>Canines</td>
<td>142 – 3,956</td>
<td>-</td>
</tr>
<tr>
<td>Tiger bone wine</td>
<td>35 – 269</td>
<td>-</td>
</tr>
<tr>
<td>Tiger bone jewellery</td>
<td>113 – 1,500</td>
<td>-</td>
</tr>
<tr>
<td>Tiger bones</td>
<td>-</td>
<td>1,326 – 2,174</td>
</tr>
<tr>
<td>Claws</td>
<td>59 – 800</td>
<td>-</td>
</tr>
<tr>
<td>Glue/bone paste</td>
<td>-</td>
<td>8,000</td>
</tr>
<tr>
<td>Whiskers</td>
<td>6.25</td>
<td>-</td>
</tr>
<tr>
<td>Bone buckles</td>
<td>100</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 2: Overview of price ranges according to commodity type across the region.

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33 https://news.thaipbs.or.th/content/316532
34 This includes both live and dead tigers. In some cases, the price offering was unclear.
35 An unprocessed tiger is whole and intact. On the contrary, a processed tiger is one that includes slaughter for parts and products.
Adults

The Wildlife Justice Commission received offers for adult tigers from Lao PDR and Vietnam. The tigers that originated from Laotian farms were still alive at the time of offer. One farm had access to over 300 tigers ranging from 100 to 200 kg and offered to sell live adult tigers at USD 285 per kg. This resulted in a range from USD 28,500 to USD 57,000 per live tiger. Another trafficker was able to source ‘small’ and ‘big’ tigers from a farm outside Vientiane, priced between USD 28,988 and USD 43,483, respectively. Processing services were not offered. This supports the inference that farms in Lao PDR are servicing the demand for live tigers for other captive facilities in Southeast Asia.

Regarding Vietnam, the offers for adult tigers came from slaughter or storage facilities. In some cases, it appears the tigers were still alive prior to sale. Delivery could sometimes be arranged to China, including Pingxiang and Dongxing. Some offers included processing fees, which ranged from USD 263 to USD 269 per kg. Processing is laborious and includes the removal and separation of skin, canines, claws, meat, and bones. Other offers – ranging from USD 158 to USD 206 per kg – excluded processing, which implied that dead tigers could be shipped whole from Vietnam to China.

Cubs

Wildlife Justice Commission intelligence suggests that cubs are in higher demand than adult tigers. Between 2016 and 2022, the Wildlife Justice Commission was offered live cubs ranging from USD 7,648 to USD 17,500 per tiger. Delivery was not usually included in the price. In one case, however, delivery from Thailand to Bangladesh via air was offered for an extra USD 1,000.

Ten dead tiger cubs were also offered to the Wildlife Justice Commission from a well-known Laotian farm. Originally, the target agreed to sell five sets of two cubs for THB 80,000 each (approximately USD 2,460), including delivery to Vientiane. The target later increased the price to almost double at THB 150,000 each (approximately USD 4,615) due to a perceived risk. Dead tiger cubs are often used to infuse wine.
Skins

The Wildlife Justice Commission was offered tiger skins between 2016 and 2019 ranging from USD 2,283 to USD 15,825. However, most of the pricing falls well below USD 8,000. The average price for a tiger skin was approximately USD 5,374. Intelligence suggests that the skins, which ranged from 2.2 to 3.16 m in length, were mostly sourced from Vietnam and that delivery was usually excluded. However, on several occasions, delivery was offered from Vietnam (including Mong Cai and Hoai Thuong) to multiple cities in China including Shanghai, Dongxing and Pingxiang. The cost of delivery was usually included in the offer.

Image 13: Dried, rolled up tiger skins offered to undercover investigators.

Image 14: Tiger skin offered to undercover investigators.
Canines

When it comes to canines, intelligence indicates a price range from USD 142 to USD 3,956. The larger the canine, the higher the price. The average price for a canine was approximately USD 1,450. Lao PDR and Vietnam appear to be the source of most canines; those adorned with gold and embellishments fetched the highest prices. On occasion, traffickers could arrange delivery from Vietnam and Lao PDR to China, including to Pingxiang.

Image 15: Fresh tiger canines available for purchase.
Image 16: Polished and gold-adorned tiger canine available for purchase.

Tiger bone wine

The Wildlife Justice Commission has only collected prices for tiger bone wine from Lao PDR at a retail level. Although a one litre bottle was available for USD 269, bottles typically ranged from USD 35 to USD 70.

Image 17: Tiger bone wine available for purchase at a shop in Lao PDR.
Image 18: Tiger bone wine available for purchase at a shop in Lao PDR.
Tiger bone jewellery

Pricing on tiger bone jewellery – specifically bracelets and necklaces at the retail level – was available in Lao PDR and Cambodia and ranged from USD 113 to USD 1,500. Lao PDR accounted for the lowest prices (USD 113 to USD 551), while Cambodia accounted for the highest (USD 1,000 to USD 1,500). A shop owner in Lao PDR could arrange delivery to China.

There is also intelligence to indicate that some of the bones available in Vietnam were originally sourced from Vietnamese-owned farms in South Africa.

Bones

Organised crime groups offered bones from Vietnam and Lao PDR, which were sold by the kg, ranging from USD 1,326 to USD 2,174. The average price for bones is USD 1,719 per kg. Delivery could be arranged from Lao PDR, via Luang Prabang or Vientiane, to China.
Claws

In Vietnam, a trafficker priced claws anywhere from USD 100 to USD 600, depending on the size. The price averaged around USD 350 per claw. In Lao PDR, a trafficker offered pricing between USD 120 and USD 126. Indonesia offered the lowest price of USD 59 per claw, while Cambodia offered the highest pricing at USD 800 per claw.

Image 22: Polished and ornate tiger claw offered to undercover investigators.

Glue/bone paste

The Wildlife Justice Commission was offered wholesale tiger glue/bone paste from a Vietnamese trafficker at USD 800 per 100 g, which equates to USD 8,000 per kg. The bones were allegedly sourced from a Vietnamese-owned South African tiger farm.

Image 23: Tiger bone paste offered to undercover investigators.

Whiskers and bone buckles

Whiskers and bone buckles were available in Lao PDR at the retail level and cost approximately USD 6.25 and USD 100 per unit, respectively.
Conclusion

In this Lunar Year of the Tiger, there is a palpable, renewed motivation to protect the world’s largest big cat. Together, we must maintain the momentum and ask tough questions about the rationale of maintaining tiger farms that are known to engage in the criminal diversion of tigers into the hands of organised crime groups.

Intelligence gaps

The intelligence and evidence collected through Operation Ambush over the last six years clearly demonstrates that transnational organised crime networks continue to prosper from the exploitation of captive tiger facilities. However, it represents only a fraction of the activity occurring within the illegal tiger trade in the Greater Mekong region. As a result, the following intelligence gaps have been identified:

- The full scope of tiger farming in the Greater Mekong region, given that many captive tiger facilities operate in the shadows;
- The number of captive tiger facilities that are operating with and without licenses;
- The financial cost of bribery along the supply chain, and at what levels, that enable the efficient and steady flow of tigers, parts and products;
- Whether there is an increasing demand for tiger cubs for the pet trade;
- Whether Thai tiger farms are utilising local pet shops as brokers to sell tiger cubs; and,
- The true extent of Cambodia, China and Myanmar’s involvement in supplying farmed cubs and tigers.

The solution cannot be achieved by one government or organisation alone. These gaps can only be closed by sharing intelligence, collaborating on investigations, and committing to ending the illegal tiger trade together.
Recommendations

While law enforcement progress is being made, there is still a way to go. Current threats, such as privately-owned tiger farms, the South African lion bone trade, and liger trade continue to counteract efforts to combat the illegal tiger trade. For that reason, the Wildlife Justice Commission suggests the following recommendations for law enforcement and policy makers:

- **Align domestic policy and legal frameworks** with current CITES Resolutions and Decisions on Asian big cat species, including (but not limited to) regular and timely audits on all captive tiger facilities – especially those that are privately-owned – in order to limit the criminal diversion of captive tigers to the illegal trade;

- **In countries that operate on a licensing system** for captive tigers, establish a national database in which DNA samples are recorded for each captive tiger to assist in determining the origin of seized tigers and their parts;

- **Support the use of innovative tools** in identifying seized tigers and their parts, such as Environmental Investigation Agency’s stripe-pattern database;

- **Undertake stronger enforcement activities** such as significant fines or forced closures when captive tiger facilities are found to be non-compliant;

- **Deliver stricter penalties** for individuals who engage in the illegal tiger trade;

- **Consider the legal status** of ligers given the crossover with the illegal tiger trade as demonstrated in this report and that of other hybrid big cat species given that wildlife traffickers are known to diversify;

- **Consider the ramifications of the lion bone trade** on the global illegal tiger trade, given that transnational organised crime networks have exploited this as a conduit to do business between Africa and Southeast Asia;

- **Consider changes to domestic policy**, such as the use of labelling laws, to ensure protection for all CITES-listed species regardless of whether they are non-native to a jurisdiction;

- **Place more emphasis on combatting the illegal tiger trade** at the regional level by providing resources to the jurisdictions that need it most, such as law enforcement and border control, and financial crime and technological expertise;

- **Improved collaboration** for sharing of intelligence; and,

- **Create a comprehensive and viable plan** for captive tigers from current captive facilities in Lao PDR, Thailand and Vietnam, that will cease operations. Among others, this plan would address the logistics of transferring captive tigers to appropriate sanctuaries that most emanate a tiger’s natural habitat and environment and could consider issues related to potential financial compensation to owners of captive facilities to offset lost income.

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Law enforcement and legal experts fighting transnational organised wildlife crime.