U.S.-China Economic and Security Review Commission

Staff Research Report



December 6, 2018

China's Role in Wildlife Trafficking and the Chinese Government's Response

Suzanna Stephens, Policy Analyst, Economics and Trade Matthew Southerland, Policy Analyst, Security and Foreign Affairs

Acknowledgments: The authors thank Dr. Peter J. Li, Dr. Vincent Nijman, staff of a number of international nonprofits, the Environmental Investigation Agency, and officials from the U.S. Department of State and the U.S. Department of the Interior for their helpful insights and reviews of early drafts. Their assistance does not imply any endorsement of this report's contents, and any errors should be attributed solely to the authors. The authors would also like to express their admiration for the organizations, researchers, and personnel dedicated to the fight against wildlife trafficking.

Disclaimer: This paper is the product of professional research performed by staff of the U.S.-China Economic and Security Review Commission, and was prepared at the request of the Commission to support its deliberations. Posting of the report to the Commission's website is intended to promote greater public understanding of the issues addressed by the Commission in its ongoing assessment of U.S.-China economic relations and their implications for U.S. security, as mandated by Public Law 106-398 and Public Law 113-291. However, the public release of this document does not necessarily imply an endorsement by the Commission, any individual Commissioner, or the Commission's other professional staff, of the views or conclusions expressed in this staff research report.

Table of Contents

Executive Summary	3
Introduction	∠
China's Role in the Global Market for Wildlife Products	6
Drivers and Scope of Chinese Consumer Demand	
Making Markets: How Wildlife Products Are Sourced and Sold in China	8
China's Wildlife Regulation and Enforcement	9
Chinese Antitrafficking Laws	10
Laws' Implementation and Enforcement	10
Greater Levels of International Engagement	11
Legal, Implementation, and Enforcement Challenges	12
Legal Challenges	12
Implementation Challenges	
Enforcement Challenges	14
Potential Success Story: Ivory	15
Continuing Challenge: Tiger Products	16
Considerations for Congress	17
U.S. Domestic Considerations	18
Working-Level Bilateral Considerations	19
High-Level Bilateral Considerations	20
Appendix: U.S. Policies and Efforts to Counter International Wildlife Trafficking	21

Executive Summary

Overlooked, underpoliced, and highly lucrative, international wildlife trafficking has become a low-risk/high-return illegal trade estimated at \$7 billion to \$23 billion annually. While China's share of this trade is unknown due to the trade's illicit nature, China is widely recognized as the world's largest market for trafficked wildlife products. As the Chinese economy has grown, demand for wildlife products—including endangered species—has increased, contributing to the decline in populations of iconic species such as elephants and rhinos, as well as lesser-known species. Three factors play into Chinese demand for wildlife products: (1) wildlife products are valued as status symbols; (2) wildlife products represent a financial asset with stable or increasing value; and (3) wildlife products are perceived to have health benefits related to traditional Asian medicine. Until recently, however, public knowledge in China about wildlife trafficking and conservation efforts has been limited.

China has been a party to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) since 1981 and has a legal framework in place to regulate international trade in wildlife. However, China's domestic framework undermines its ability to protect CITES-listed species in a number of ways. There are inconsistencies between China's domestic list of highly-protected species and those protected by CITES' Appendix 1 list; China's central government devolves implementation to local governments that may have conflicts of interest; and China's domestic laws contain loopholes that allow domestic trade in captive-bred CITES-listed wildlife, their parts, and associated products.

China's Wildlife Protection Law (WPL)—the primary legislation guiding Chinese government efforts to combat wildlife trafficking, revised in 2016—permits the captive breeding of CITES-protected species, hindering enforcement efforts. China's domestic trade in tiger parts and their derivatives has continued and even expanded despite CITES' calls to stop captive-breeding practices. In 2018, China announced—then delayed implementation of—exceptions to its ban on trade in rhino horns and tiger bones, presenting a further challenge to wildlife protection. Captive breeding in China creates an additional burden on law enforcement by providing a means for traffickers to hide and sell their wares under the cover of legal activity.

This report focuses on the illicit wildlife trade in China: local demand, means of supply, the Chinese government's response to rising demand, and ways markets in China might be controlled to decrease poaching and the illegal trade abroad. U.S. interest in wildlife trafficking derives from three concerns: (1) species conservation; (2) diverting revenue away from criminal organizations and militant groups; and (3) eradicating corruption, which enables both the wildlife trade and parallel illegal markets (e.g., arms and narcotics). Some considerations include U.S. advocacy in dialogue with partner countries, at CITES, and at other multilateral fora; technical support and exchanges; coordinated policy action between wildlife-supplying countries and Chinese and U.S. counterparts; and coordinated international actions to decrease demand for illegal wildlife products and disrupt trafficking supply chains.

Scope Note

This report's scope is restricted to the international illegal trade—or "trafficking"—in fauna. According to CITES, "fauna' are animals and birds, such as tigers and falcons, but also include fish." The U.S. Fish and Wildlife Service defines "wildlife trafficking" as the "poaching or other taking of protected or managed species and the illegal trade in wildlife and their related parts and products."

To maintain a focus on wildlife trafficking supply chains, this report excludes commercial activities like industrial-scale illegal fishing due to distinct trends and regulatory treatment.

Introduction

Demand for trafficked wildlife products within China has grown in tandem with China's economy and global presence, though reasons for purchasing such products have shifted over time. As China remains the largest global market for trafficked wildlife products, its demand has led to further population decreases in iconic species such as elephants, rhinos, and big cats, as well as in lesser-known species like pangolins (scaly anteaters). This report analyzes drivers of China's demand for illicit wildlife products; routes developed and tools used to supply this demand; how Chinese regulations have sought to control this market; what successes these regulations have produced; and what legal, implementation, and enforcement gaps remain as a result. International trade in wildlife is governed by a multilateral agreement, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). While China is technically compliant with CITES, gray areas in the Chinese government's antitrafficking enforcement and treatment of captive breeding—not regulated by CITES—create opportunities for the illicit wildlife trade to flourish.

The Chinese government's success in deterring the illegal wildlife trade has varied by species, as illustrated by case studies of ivory and tiger products. Early signs of success in China's ivory ban show multilateral engagement and joint action are effective in convincing China to prioritize antitrafficking efforts in specific species. By understanding and addressing drivers of Chinese demand, nongovernmental organizations (NGOs) have worked to educate consumers and conduct policy advocacy, while the United States and elephant range countries* applied diplomatic pressure in high-level bilateral engagement. This pressure took effect in part because concerns were communicated in high-level diplomatic meetings and in part because the ivory trade had come to be associated with the Chinese diaspora in countries like Tanzania, leading to diplomatic embarrassment. High-level bilateral discussions led to joint action: in 2016, the United States and China agreed to a ban on the ivory trade, which did away with a licensing system that served as a cover for illicit trafficking, resulting in a falling price for ivory. Thus, a confluence of domestic and international pressure and U.S.-China joint action helped lead to a positive outcome.

Achieving similar results with other species may be challenging, as seen in the case of tiger products. The United States and tiger range countries have not exerted as much pressure on high-ranking Chinese officials to address this trade. Regulatory loopholes in captive breeding, the usage of seized or stockpiled product (i.e., product that predates the species' protected status), and lack of penalties for ownership allow the illegal trade to persist. Notably, China's lead regulatory agency on antitrafficking, the National Forestry and Grassland Administration (SFA),† tends to hold the position that wildlife—including endangered species—can be managed as a kind of natural resource. The most recent revision of the Wildlife Protection Law (WPL) in 2016 upheld SFA's general perspective and left these loopholes in place. In October 2018, these loopholes were expanded to allow the use of tiger bone and rhino horn products under special circumstances; however, implementation has been postponed due to the global outcry in response to this decision.^{‡3} Domestic interests, including commercial breeders and some traditional medicine practitioners, lobbied to preserve captive breeding loopholes, while academic researchers, NGOs, and environmental groups have argued for their removal, as the loopholes increase illegal trade.⁴ World Wildlife Fund

*

^{* &}quot;Range countries" refers to the countries where animals are found and "through which migratory animals pass," a concept employed by conservation biologists and also found in the Convention on the Conservation of Migratory Species of Wild Animals. In the case of elephants, such countries would include Botswana, Kenya, South Africa, Tanzania, Zambia, and Zimbabwe, among others. World Wildlife Fund, "African Elephants." http://wwf.panda.org/knowledge_hub/endangered_species/elephants/african_elephants/.

[†] Following the Chinese government reorganization in March 2018, the State Forestry Administration (国家林业局) changed its name, first to the State Forestry and Grassland Administration, then to the National Forestry and Grassland Administration (国家林业和草原局).

In an interview, State Council Executive Deputy Secretary-General Ding Xuedong stated the government had delayed implementation: "The circular should be implemented based on its detailed regulations for implementation. The issuance of the detailed regulations for implementation has been postponed after study. The 'three strict bans' will continue to be enforced: strictly ban the import and export of rhinos, tigers and their byproducts; strictly ban the sale, purchase, transport, carrying and mailing of rhinos, tigers and their byproducts; and strictly ban the use of rhino horns and tiger bones in medicine." Xinhua, "Full Transcript: State Council Executive Deputy Secretary-General Ding Xuedong Answers Media Questions," November 12, 2018. http://www.china.org.cn/china/Off_the_Wire/2018-11/12/content_71941870.htm (From=groupmessage&isappinstalled=0.

Wildlife Practice Leader Margaret Kinnaird stated the resumption of a legal trade would be "an enormous setback to efforts to protect tigers and rhinos in the wild." 5

U.S. bipartisan support to counter wildlife trafficking stems from its interest in disrupting illicit supply chains, encouraging species conservation, and fighting corruption. Future U.S.-China engagement could target supply mechanisms like supply chain chokepoints, logistics services, porous borders, and loopholes used as cover, while coordinating to target sources of demand by changing consumer opinion, promoting environmental stewardship, and enacting meaningful purchase and ownership deterrents.

What Is CITES?

CITES is a multilateral agreement aiming to ensure "international trade in specimens of wild animals and plants does not threaten their survival." CITES seeks to regulate international trade in wildlife to prevent extinction. CITES' three appendices list different categories of animal species whose trade should be controlled: Appendix I lists species "threatened with extinction," Appendix II lists species "in which trade must be controlled in order to avoid utilization incompatible with their survival," and Appendix III lists species "protected in at least one country, which has asked other CITES Parties for assistance in controlling the trade." CITES promotes trade regulation by encouraging parties to enact domestic law penalizing trade in endangered species. To that end, CITES has effective, built-in enforcement mechanisms compelling parties to implement minimum requirements in domestic legislation and report wildlife trade annually.*

CITES and domestic trade in captive-bred CITES-listed species: Domestic trade in captive-bred CITES-listed species is a contested issue, but CITES has no binding mechanism to address it. Strictly speaking, CITES governs international—not domestic—trade. In 1994, CITES adopted a resolution urging parties to stop domestic trade in tiger parts. In 2007, CITES parties passed a decision that "parties with intensive operations breeding tigers on a commercial scale shall implement measures to restrict the captive population to a level supportive only to conserving wild tigers; tigers should not be bred for trade in their parts and derivatives." This decision was understood to refer to both international and domestic trade¹¹; however, CITES decisions and resolutions are non-binding.

Observers have challenged the utility of captive breeding to conservation and highlighted its role in facilitating and driving illegal trade in endangered wildlife. ¹³ At the 17th CITES Conference of the Parties in 2016, CITES recognized captive breeding operations could "launder" illegal product: "There is growing evidence of cases of illegal trade in wild-caught specimens of CITES-listed species, through fraudulent claims that wild-caught specimens are captive-bred." ¹⁴ The international community is increasingly focused on this issue, and there is a growing call for countries to enact domestic bans on wildlife farms. ¹⁵

^{*} According to officials at the U.S. Department of the Interior, the agreement contains effective enforcement mechanisms at its disposal. The CITES Standing Committee has previously threatened to consider suspension of international trade in CITES-listed species. For example, in July 2014 the CITES Standing Committee requested that Thailand make significant progress in regulating its domestic ivory market in a broader effort to combat ivory trafficking. If progress had not been made by the end of March 2015, the Committee had the option to recommend a suspension of international trade in CITES-listed species. This suspension would affect more than \$80 million in annual CITES-listed orchid exports using 2013 figures. Officials at the U.S. Department of the Interior, interview with Commission staff, April 26, 2018; World Wildlife Fund, "Thailand Faces Sanctions If It Fails to Stop Ivory Trade," March 19, 2015. https://www.worldwildlife.org/stories/thailand-faces-sanctions-if-it-fails-to-stop-ivory-trade; Convention on International Trade in Endangered Species of Wild Fauna and Flora, "Press Release: CITES Standing Committee (SC65) Conclusions: A Focus on the Front Lines," July 14, 2014. https://www.cites.org/eng/news/pr/2014/SC65_focus_on_the_front_lines.

China's Role in the Global Market for Wildlife Products

China is the world's largest market for illegal wildlife trafficking, although researchers' ability to estimate the volume of this trade is hampered by its illicit nature.*16 The nonprofit TRAFFIC reported that between 2010 and 2013, "the Chinese market has been more heavily implicated in illicit trade in ivory than any other country," as shown by statistical research on the Elephant Trade Information System database.¹⁷ Another 2015 analysis of wildlife product seizures identified China, Thailand, and Vietnam as regional product transit points and end destinations where policies targeting customs screening and public education might have the greatest impact.¹⁸ Most recently, in November 2017, the U.S. Department of State, in consultation with the U.S. Department of the Interior, U.S. Department of Commerce, and other agencies of the Task Force on Wildlife Trafficking, listed China as a "focus country," a major source, transit point, or consumer of wildlife products.¹⁹

In its assessment of wildlife trafficking across the trading area of mainland China, Hong Kong, Thailand, and Vietnam, the U.S. Government Accountability Office noted wildlife products are often perceived as luxury items and status symbols, consumed as decorative objects, kept as exotic pets, used in traditional medicine, and served as gourmet delicacies.²⁰ The list of species at risk in this trade is extensive.[†] Table 1 provides a few examples.

Table 1: Examples of Trafficked Species

Animal	Product	Perceived Uses
African Elephant		
Asian Elephant	Ivory, animal skin, trunk	Carvings, art objects, remedies
Rhinoceros	Horn	Carvings, art objects, remedies
Tiger	Pelt, teeth, bones, organs, claws	Décor, bone wine, remedies, delicacies
Sun Bear		
Asiatic Black Bear	Bile, gallbladder, paws	Remedies, delicacies
Leopard		
Clouded Leopard	Pelt, teeth, bones, live sale,	
Snow Leopard	claws	Décor, remedies, pets
Pangolin (Scaly Anteater)	Scales, meat, live sale	Remedies, delicacies
Hammerhead Shark		
Porbeagle Shark	Fins, sometimes meat	Delicacies
Manta Ray	Gill plates	Remedies
Spotted Turtle		
Gold Coin Turtle		
Ploughshare Tortoise		
Asian Brown Tortoise	Live sale	Pets, remedies, delicacies

^{*} Many challenges hinder researchers' ability to estimate the volume and value of wildlife products sold in China, including incomplete and, in some cases, flawed international wildlife trade data, the wide variety of products in this trade, and the lack of data on prices and volumes due to the illicit nature of the trade. Instead, researchers seeking to illustrate China's importance in global wildlife trafficking often cite the frequency with which seized products list China as a final destination. According to the Center for Advanced Defense Studies' (C4ADS) review of 2009–2017 airport seizure data, China was the most common global destination for ivory, rhino horn, reptiles, pangolins, marine products (e.g., seahorses, rays and sharks, eels), and mammals (a wide array of mammals and products including teeth and claws, parts, bile, and skins). Mary Utermohlen and Patrick Baine, "In Plane Sight: Wildlife Trafficking in the Air Transport Sector," *Center for Advanced Defense Studies and USAID-ROUTES*, August 2018, 36, 48, 66, 105–106, 125, 140–141. https://routespartnership.org/industry-resources/publications/in-plane-sight/view.

[†] The true number of species at risk is unknown. More detailed, coordinated, and timely accounting in wildlife international trade data collection would improve CITES' ability to measure the wildlife trade and help preserve all species, not only highly visible species like elephants, rhinos, and tigers. Researchers have documented several weaknesses that complicate CITES' measurement of wildlife trade flows and hinder assessments of trade volume by species. See Jacob Phelps et al., "Boosting CITES," *Science* 330 (2010): 1752–1753.

Note: Animals listed above are trafficked internationally for consumption in China as well as in other countries. *Source:* Various.²¹

Drivers and Scope of Chinese Consumer Demand

Multiple observers report China's demand for wildlife products has grown in tandem with its economy. Analysts have posited three drivers of demand: (1) use of wildlife products as status symbols, (2) use of wildlife products as a type of asset for investment, and (3) use of wildlife products in traditional Asian medicine and remedies.

- 1. Status symbols: In China, wildlife products are often regarded as valuable luxury items. In 2012, the international conservation group International Fund for Animal Welfare (IFAW) alerted the INTERPOL Wildlife Crime working group that wealth-driven demand for animal products had overtaken demand for medicinal usage.²² For example, the Chinese media portrayal of rhino horn typically focuses on its monetary value, rather than its medicinal or even artistic value.²³ Aside from their value as personal assets, wildlife products are also valued for gift-giving or bribes.²⁴
- 2. Asset value: In some instances, Chinese households may choose to hold rare wildlife products as a type of asset.²⁵ Low investment returns on savings accounts and some real estate markets have led savers to expand into artwork and carvings, including ivory carvings.²⁶ The wholesale price of ivory tripled between 2006 and 2011.²⁷ Chinese ivory sellers frequently describe products as a good store of value despite inflation.²⁸
- 3. *Traditional medicine:* Certain animal products are believed to possess benefits related to traditional Asian medicine, although some species poached for this trade—like jaguars—are not native to Asia and have not been historically consumed.* Although many traditional Asian medicine practitioners condemn the use of endangered species, misinformation is rampant.²⁹ While researchers argue for artificial substitutes, some traditional Asian medicine advocates in China believe stringent animal rights laws could hurt the industry.³⁰ In some instances, official Chinese institutions supported their concerns: (1) products like rhino horn were only removed from the *Pharmacopoeia of the People's Republic of China* in the early 1990s; (2) in the 2016 WPL revision, National People's Congress (NPC) Natural Resources Law Drafting Office Director Zhai Yong agreed tiger bones' use in traditional medicine was "sensitive" and "controversial" but should be considered "from the perspective of treating patients"; and (3) as of March 2017, the State Administration of Traditional Chinese Medicine still listed pangolin scales as an approved ingredient.³¹

Lack of public knowledge in China regarding species' threat of extinction supports demand. In 2007, an IFAW survey of Chinese consumers found 70 percent of respondents were unaware elephants were killed to supply ivory.³² To highlight this point, an IFAW public service announcement impact evaluation recommended emphasizing the death of the animal in the trade as well as the danger to the species.³³

Despite consumer demand for wildlife products, much of Chinese civil society favors increased wildlife protections. Environmental NGOs, volunteers, and online commentators have voiced concerns and demanded improvement in animal welfare.³⁴ When the 2016 WPL draft was released, Chinese environmental researchers, scientists, and NGOs expressed shock and disappointment at the text's continued reference to wildlife utilization and provisions regarding commercialization.³⁵

^{*} As tigers grow increasingly rare, traffickers often substitute jaguar or other big cat teeth for tiger teeth. Though hunting jaguars is illegal in Bolivia, authorities seized about 800 jaguar teeth between 2014 and 2016. Rachael Bale, "On the Trail of Jaguar Poachers," *National Geographic*, December 2017. https://www.nationalgeographic.com/magazine/2017/12/on-the-trail-of-jaguar-poachers/; Mimi Yagoub, "Chinese Smugglers Driving up Jaguar Killings in Bolivia," InSightCrime, August 26, 2016. https://www.insightcrime.org/news/brief/chinese-smugglers-drive-up-jaguar-killings-in-bolivia/.

Making Markets: How Wildlife Products Are Sourced and Sold in China

Wildlife products arrive in China via multiple transit points and intermediaries. The precise routes vary by species, but these routes can be viewed as potential chokepoints for targeted action. The supply chain outlined below takes rhino horn as an example, using investigations by the nonprofits TRAFFIC and the Elephant Action League (EAL):

- Air or water transport: Most rhino horn shipments bound for China, Hong Kong, or Vietnam leave from South Africa, Zimbabwe, Mozambique, or Namibia, with intermediate stops in Cambodia, Ethiopia, the EU, Hong Kong, Indonesia, Kenya, Malaysia, Qatar, Singapore, or the United Arab Emirates.³⁶ Based on a Center for Advanced Defense Studies (C4ADS) analysis of air seizures, traffickers tend to move illegal products through airports with lax screening and many connecting flights.³⁷
- Overland: To move rhino horn products into China, a large share of goods crosses the border with Vietnam, with smaller amounts from Burma (Myanmar), Malaysia, Laos, and India (see Figure 1). This is typically done either through a port of entry or across mountain trails in Guangxi Province and parts of Yunnan Province. Some Vietnamese dealers also claim to use certain shipping companies to transport contraband. Investigators observed similar routes used for arms and narcotics. From the border with Yunnan and Guangxi, rhino horn is transported to retail markets in Guangdong, Fujian, Zhejiang, and Beijing, sometimes via courier. Social media platforms like WeChat may be used to contact buyers, and Alipay may be used as a payment method.



Figure 1: Overland Smuggling Routes for Rhino Horn

Source: Elephant Action League, "Grinding Rhino: Operation Red Cloud Investigative Report: An Undercover Investigation on Rhino Horn Trafficking in China and Vietnam," July 2017, 65. https://elephantleague.org/wp-content/uploads/2017/07/Grinding-Rhino-July2017-Elephant-Action-League.pdf.

Upon arrival in retail markets, buyers can locate and purchase wildlife products through retail outlets or online platforms. Following purchase, registered courier services in China or the place of purchase are often used to deliver the contraband.⁴⁴

• *Retail outlets:* Retail outlets often advertise art and antiques, redwood furniture, or traditional Chinese medicine. ⁴⁵ These stores typically do not hold much illicit inventory but prefer to source on demand. ⁴⁶ Rhino horn dealers maintain links with suppliers in Guangxi or Vietnam. ⁴⁷

• Online platforms: Internet platforms have facilitated the illegal wildlife trade, even after such items were banned from major Chinese websites. In 2007, Wan Ziming, then director of the Law Enforcement and Training Division of the CITES Management Authority of China, reported the use of Taobao and other online platforms for the sale of ivory and other products. A 2017 GlobeScan consumer survey found that e-commerce platforms remain the most common way to purchase wildlife products online. As regulations are increasingly enforced, however, online vendors have changed their platform usage. TRAFFIC social media monitoring found that endangered species listings on e-commerce and antiques websites dropped from about 25,000 in 2012 to about 14,000 in 2016, but traders had shifted to the WeChat social media platform where sales were harder to monitor.

China's Wildlife Regulation and Enforcement

As demand for illegal wildlife products has grown in China and the global supply chain has expanded, the Chinese government has strengthened its laws and regulations, demonstrated strong law enforcement capabilities, and enhanced engagement with other countries to combat international wildlife trafficking. However, notable legal, enforcement, and cooperation challenges remain.

Since China's accession to CITES in 1981 (see text box following Introduction), the Chinese government promulgated various laws and regulations concerning the protection and trafficking of endangered species, beginning with the passage of China's WPL in 1988 and including a circular that banned trade in rhino horn and tiger bone in 1993 (this ban was partially reversed in October 2018).⁵¹ China's WPL is the primary legislation governing China's efforts to combat wildlife trafficking (see Figure 2). The WPL's purpose, as stated in its 2016 revision, is "protecting [wild] animals, saving rare and endangered species of wild animals, maintaining biodiversity and ecological balance, and advancing the building of ecological civilization."⁵²

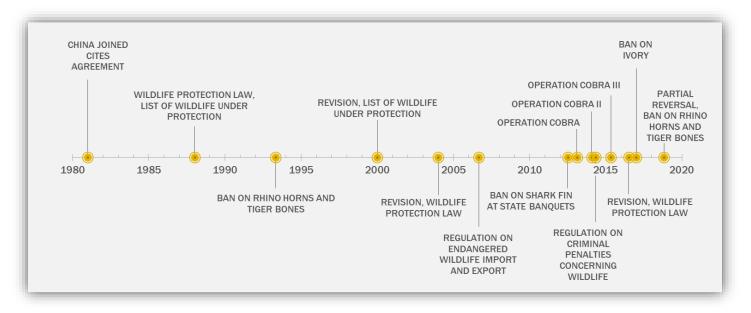


Figure 2: China's Wildlife Regulation and Enforcement Actions, 1980 to 2018

Note: This figure includes regulations pertinent to the issues discussed in this paper and does not include laws related to forestry, the establishment of nature reserves or national parks, or protection for wild plants. Dates shown in this figure reflect the date of law enactment, not implementation, due to the phased implementation of laws like the ban on ivory. This figure does not represent an exhaustive list of China's participation in multilateral operations.

Source: Created by Commission staff. Various.⁵³

Chinese Antitrafficking Laws

Chinese laws regulating wildlife protection distinguish between categories of animals, which designate the entities responsible for their protection. After its passage in 1988, the WPL created a two-tier classification system for state-protected wildlife, with first-tier species under the jurisdiction of the State Council, China's highest government body, and second-tier species under the jurisdiction of local governments. Since the 2016 WPL revision, local governments have assumed increased responsibility. The Chinese government identified species in each tier, with the first tier including the giant panda, snow leopard, Asian elephant, and the dugong, a manatee-like marine mammal. The lists initially excluded species not native to China, but in 1993 the Chinese government began to add some species—such as the rhinoceros and African elephant—from other countries. CITES-listed species like black bears and pangolins are not yet included in the first tier.

Chinese laws against wildlife trafficking—and legal penalties for breaking them—have become increasingly strict. Jiwen Chang, deputy director of the Resources and Environmental Policies Research Institute in the State Council's Development Research Center, noted that "since 2013, under the frame of construction of ecological civilization, China has taken stricter measures on legislation, administrative enforcement, judicial adjudication, and international cooperation in prevention and punishment of illegal trafficking." In 2014, the standing committee of China's legislature, the NPC, adopted an interpretation of China's criminal law specifying that the definition of wildlife-related crimes includes purchasing protected wildlife and their products for food or other purposes. Punishment in China for illegal wildlife trade can be as severe as life in prison. In addition, the 2016 revision of the WPL eliminated language from the original law stating the government would reward "outstanding achievements" in wildlife domestication and breeding. The revised law also banned the use of online platforms for the illegal sale, purchase, or use of wildlife, reflecting technological developments since the original law was passed. Finally, in 2018 the Chinese government instituted a near-complete ban on the sale of ivory in conjunction with a parallel ban enacted in the United States. This ban is discussed further below.

Laws' Implementation and Enforcement

SFA and the General Administration of Customs take the lead in combating wildlife trafficking in China.⁶⁴ The General Administration of Customs and local customs divisions conduct seizures during cross-border entry-exit inspections, while SFA's Forest Police Bureau and the forest branches of local public security bureaus carry out other seizures of trafficked wildlife and wildlife products.⁶⁵ China's CITES Management Authority, also known as the Endangered Species Import and Export Management Center, coordinates the Chinese government's efforts to uphold its CITES obligations and represents China at CITES meetings.⁶⁶ SFA also leads the government's efforts to reduce demand for endangered species in China.⁶⁷ According to the Environmental Investigation Agency (EIA), an international wildlife conservation organization, "Where the political will exists, Chinese government agencies are capable of in-depth, intelligence-led investigations into illegal wildlife trade. ... Advanced investigation techniques, including use of phone records, social media, and controlled deliveries, have been applied in wildlife trade cases." SFA and the General Administration of Customs have also jointly conducted the public destruction of some seized ivory.⁶⁹

The Role of Nonprofits in Endangered Species Conservation in China

Domestic Chinese and international nonprofits play an important role in implementation efforts, building political will to reduce demand for trafficked products in China. One of the early successes was a celebrity and NGO-led campaign against shark fin soup, often served at wedding and New Year banquets. All 14 shark species frequently caught for finning have a reported regional population decline of between 40 and 99 percent over a 20 to 30 year period. To combat this trend, the international NGO WildAid produced public service announcements that were widely broadcast and featured celebrities like Jackie Chan and Yao Ming. Following these campaigns, in July 2012 the Chinese government announced a ban on shark fin soup at state banquets. State and private media partnerships also contributed about \$164 million into "pro-bono media placement" for WildAid's public service

announcements in 2013.⁷⁴ WildAid now points to "declining shark fin trends in mainland China," with China's CITES Management Authority reporting an "80 percent reduction in consumption, as well as 81 percent declines in the country's shark fin imports and sales in Beijing, Shanghai, and Guangzhou between 2010 and 2014."⁷⁵ These figures were comparable with a 2013 WildAid survey in Guangzhou that found an 82 percent drop in fin sales.⁷⁶

Beyond their role in implementing conservation efforts, nonprofits also work with Chinese government actors to train enforcement personnel. The nonprofit TRAFFIC has helped train officers and facilitated the entry of wildlife-detection dogs into China.⁷⁷

NGO Law and NGO status in China: The Chinese government has issued recent regulations on international nonprofits, particularly the Foreign NGO Law adopted in the spring of 2016.* In addition to new establishment and operation requirements, the Foreign NGO Law permits work under the vague stipulation it does not "harm China's national interests, societal public interest,' or engage in or fund for-profit, political, or religious activity." It also prohibits foreign nonprofits from fundraising in China. After the law's implementation in 2017, many foreign nonprofits encountered difficulties registering with the police as required: of about 7,000 foreign nonprofits in China, 91 had successfully registered by June 2017, while Xinhua confirmed more than 780 organizations had consulted the police on registration. State Department officials also indicated the NGO law has made it more difficult for international environmental NGOs to operate in China. Reflecting these challenges, in June 2017 the China program director of a U.S. environmental NGO told the South China Morning Post the NGO had suspended all activities in China while attempting to register. She said, "We chose to stop all activities to avoid putting ourselves and partners at risk. ... If someone wanted to target you they could easily do so, as the law is clear that registration is required." This new legal environment has left many foreign nonprofits uncertain as to their status.

Greater Levels of International Engagement

The Chinese government has enhanced cooperation with other governments to counter wildlife trafficking through bilateral agreements, enforcement actions, and initiatives related to conservation, as well as multilateral fora and law enforcement operations.

China and the United States cooperate on a bilateral basis and in multilateral fora. Most notably, in 2015 then President Barack Obama and Chinese President and General Secretary of the Chinese Communist Party Xi Jinping agreed to "nearly complete bans on ivory import and export." Before this agreement, Washington and Beijing incorporated discussion of efforts to combat wildlife trafficking into the U.S.-China Strategic and Economic Dialogue. The Department of the Interior Fish and Wildlife Service also engages regularly with Chinese agencies to consult on CITES implementation and to improve law enforcement capacity for countering wildlife trafficking. Notably, the U.S.-China Agreement on Cooperation in Science and Technology has been undergoing an extended renewal process since 2016, which has impacted the renewal of the U.S.-China Nature Conservation Protocol between the Department of the Interior and SFA. Consequently, the next program of exchange activities between those agencies has been delayed. Furthermore, U.S. and Chinese counterparts have engaged jointly with third countries. In 2017, the U.S., Chinese, and Mexican governments held a trilateral meeting to discuss efforts to protect two endangered marine mammals, the totoaba and the vaquita.

China also has bilateral wildlife protection cooperation agreements with South Africa and Zimbabwe, among other countries. As part of its agreement with Zimbabwe, the Chinese government donated vehicles and other equipment for antipoaching operations. China also signed a cooperation agreement on combating wildlife trafficking with

^{*} The Foreign NGO Law has been translated as the "Law of the People's Republic of China on Administration of Activities of Overseas Nongovernmental Organizations in the Mainland of China." For more information, see ChinaFile, "Law of the People's Republic of China on Administration of Activities of Overseas Nongovernmental Organizations in the Mainland of China." http://www.chinafile.com/ngo/laws-regulations/law-of-peoples-republic-of-china-administration-of-activities-of-overseas.

the EU and a memorandum of understanding with the Association of Southeast Asian Nations Wildlife Law Enforcement Network. 91

Beijing has engaged on a multilateral basis with other governments at CITES and Asia Pacific Economic Cooperation meetings as well as in conferences hosted by the Chinese and other governments. ⁹² For example, China is a member of the Global Tiger Initiative, established in 2008; the Global Tiger Recovery Program, established at the 2010 International Tiger Forum; and the Global Snow Leopard Ecosystem Protection Program, which resulted from the 2013 Global Snow Leopard Conservation Forum. Since the International Tiger Forum, China and the other tiger range countries have held a conference every two years to assess their progress in implementing the Global Tiger Recovery Program. In addition, the Global Snow Leopard Conservation Forum was held again in 2017, and in September 2018 the Chinese government hosted the International Conference for Snow Leopard Conservation. All of these conferences have produced joint declarations of common objectives pertaining to the conservation of tigers and snow leopards. ⁹³

The Chinese government has also participated in multilateral law enforcement operations to combat wildlife trafficking. Host recently, China was one of 92 countries that participated in Operation Thunderstorm, a worldwide enforcement operation that targeted individuals and networks perpetrating wildlife crime and involved seizures worth millions of dollars. Among the other multilateral operations in which Beijing has played a role were the three iterations of Operation Cobra, an initiative proposed by the Chinese government that took place once a year from 2013 to 2015. The first two iterations occurred over the course of a month and involved customs, police, and wildlife officers from more than 20 countries, including the United States, working across Africa and Asia to conduct hundreds of arrests and seizures. According to CITES, Operation Cobra II included "the first ever joint China-Africa undercover sting operation that identified and arrested members of a major ivory trafficking syndicate." The initiative expanded significantly in 2015, lasting more than two months and featuring participation from 62 countries' law enforcement agencies and operations in Europe as well as Africa and Asia.

Legal, Implementation, and Enforcement Challenges

While the Chinese legal framework for countering wildlife trafficking has become stronger overall, significant challenges remain, including: protected species' classification, the decentralization of responsibility for protection, and legal loopholes that are exploited by Chinese commercial entities and foster the growth of the illegal wildlife trade. Implementation and enforcement of this legal framework have been hampered by challenges ranging from the way SFA views wildlife to China's porous border. EIA also notes the Chinese government does not sufficiently share information.¹⁰⁰

Legal Challenges

• "Utilization" of protected species: The 2016 WPL revision was strongly criticized for expanding legal loopholes on wildlife utilization. It allowed for the "sale, purchase, and utilization" of protected wildlife for purposes of "scientific research, captive breeding, public exhibition and performance, and protection of cultural relics." International nonprofits like IFAW and EIA expressed concern that commercial entities could exploit this loophole to trade trafficked goods. It Further expanding this loophole, an October 2018 State Council notification stated China has legalized captive-bred rhinoceros and tiger products for controlled use in special circumstances (primarily in scientific research and education, medical research

^{*} At the International Tiger Forum, the tiger range countries pledged to strive to double the number of wild tigers by 2022. In 2010, the number of wild tigers was below 3,500 and falling. Since then, the number has increased to 3,890. World Wildlife Fund, "Tigers: Facts." https://www.worldwildlife.org/species/tiger#; International Tiger Forum, "The St. Petersburg Declaration on Tiger Conservation," November 23, 2010. http://cmsdata.iucn.org/downloads/st_petersburg_declaration_english.pdf.

[†] The tiger range countries are Bangladesh, Bhutan, Burma, Cambodia, China, India, Indonesia, Laos, Malaysia, Nepal, Russia, Thailand, and Vietnam. World Wildlife Fund-Canada, "13 Countries Where You Might Find Wild Tigers," July 27, 2018. https://blog.wwf.ca/blog/2018/07/27/13-countries-can-find-wild-tigers/.

and treatment, as cultural relics, and in public exhibitions). ¹⁰⁴ Overturning the prior ban on rhino horns and tiger bones, this legalization occurred despite a 2010 statement from the World Federation of Chinese Medicine Societies directing members to avoid any product exploiting endangered species. ¹⁰⁵ Though implementation has been delayed, wildlife protection activists remain concerned the notification "muddies the water" regarding the legality of these products. ¹⁰⁶ The World Wildlife Fund stated that even if usage is restricted, "this [legal] trade would increase confusion by consumers and law enforcers as to which products are and are not legal, and would likely expand the market for other tiger and rhino products." ¹⁰⁷

- Captive-bred wildlife: Despite high expectations and pressure from NGOs, the 2016 WPL revision did not prohibit commercial captive wildlife breeding. The wildlife breeding permit system increases both consumer demand and the burden on law enforcement to distinguish between legal and laundered illegal products. Laundering is difficult to prove definitively; however, researchers use a species' reproductive traits to estimate the captive-bred stock required to export a given number of animals, casting doubt on an export's "captive-bred" status. Wildlife trafficking expert Chris Shepherd noted this type of laundering occurs across a variety of animals, from turtles to snakes, lizards, birds, and mammals. 110
- Central and local responsibilities: The revised WPL further decentralized implementation of the law, so it is now primarily carried out by provincial-level governments. ¹¹¹ This devolution poses an obstacle to the implementation of China's CITES obligations: EIA has noted that responsibilities devolved in the 2016 revision lacked detail on accountability. ¹¹² Moreover, the priorities and interests of local governments and the central government are not always aligned. Local governments are under pressure to sustain economic performance and incentivized to loosely regulate wildlife industries that contribute to the local economy. ¹¹³
- Protected list inconsistencies: There are inconsistencies between species listed among China's protected species and those listed in CITES appendices.[†] Dr. Chang writes, "Some wild animals highly valued in the market, such as black bears and pangolins, are among the protected animals listed in Appendix I of CITES, but only classified as wildlife under the second class protection under Chinese law, making their level of protection lower than it should be."

Implementation Challenges

- Agency view of wildlife: A fundamental challenge to combating wildlife trafficking in China is the way SFA views wildlife. Peter J. Li, associate professor at University of Houston-Downtown and an expert on animal welfare and wildlife conservation policy in China, explained to Commission staff that SFA views wildlife as a resource to be managed rather than in terms of species conservation. As one example, SFA initially opposed complete prohibition of the domestic ivory trade in China, arguing that from a business perspective wildlife can be used sustainably as a natural resource.
- Organizational challenges: Dr. Chang states that "a lack of regulatory personnel and a limited regulatory capacity makes it difficult to find and combat all trafficking." ¹¹⁷ In a similar vein, during a meeting convened by the UN Office on Drugs and Crime in 2013, Mr. Wan Ziming listed several challenges China's law enforcement personnel face in combating wildlife crime in China and engaging with international partners on wildlife trafficking, including the lack of qualified forensic laboratories, follow-up

^{*} As one example, see Vincent Nijman, "Bogus Captive Breeding of Oriental Rat Snakes," *Oryx* 48:4 (2014): 483–484.

[†] The United States' Endangered Species Act (ESA) list of species is also not identical to CITES lists, but many researchers suggest the ESA is stricter in its regulations. The ESA's considerations include broader factors such as habitat loss, disease, and predation, as well as trade and consumption; the ESA also requires that the import of endangered species has a net result of enhancing species survival (as opposed to CITES, which allows import if trade is not detrimental to survival). For more information, see Pervaze A. Sheikh and M. Lynne Corn, "The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)," *Congressional Research Service*, September 21, 2016. https://fas.org/sgp/crs/misc/RL32751.pdf.

investigations, and incentives for authorities to detect wildlife crimes, and a small number of staff with international cooperation experience and strong English language skills.¹¹⁸

Enforcement Challenges

- *Porous borders:* China's land borders are approximately 13,600 miles long, limiting the Chinese government's ability to police them. For instance, in the Burmese border town of Mong La (see Figure 1), vendors have established a wildlife trading hub from which products like ivory, leopard skin, bear bile, and elephant skin can be transported into China.* In addition to official ports of entry, smugglers also use private border crossings with weaker security, further complicating enforcement efforts. ¹¹⁹ Although law enforcement activity in some border areas has increased, Chinese authorities taking bribes to allow contraband to cross the border is commonplace. ¹²⁰ Smugglers often can avoid extended jail time by paying fines. ¹²¹ While the borders with countries to China's south are a major conduit for wildlife trafficking, the borders with India, Nepal, Mongolia, and Russia are also problematic. ¹²²
- Insufficient information sharing: According to EIA, the Chinese government's "information sharing with source and transit countries has been severely lacking particularly in the context of trans-Himalayan wildlife trade." Notably, the Chinese government has not shared images of tiger skins seized in the Tibetan Autonomous Region with the governments of neighboring India and Nepal.† During a 2013 presentation, Mr. Wan Ziming said limitations in language skills and a heavy workload led to a reluctance to share "real time seizure information and intelligence." 124
- Legal trade and ownership: As seen in the case of ivory below, a licensed legal trade led to a black market in licenses and certificates, enabling some retail stores to launder illegal product. ¹²⁵ In this system, retailers of legal ivory products intentionally retained an ivory carving's identification card after selling it and reused it to sell another carving made from illegal ivory. ¹²⁶ Thus, a continued legal trade facilitated the laundering of other illicit wildlife products. ¹²⁷ Moreover, despite enforcement gains following the ban on ivory, ownership of wildlife products is not prosecuted under the WPL in China, which allows for gifting of products if money does not change hands. ¹²⁸
- Light risk of prosecution relative to gain: Despite a recent increase in prosecutions for ivory trafficking, the Chinese wildlife trade has been supported by the relatively light threat of prosecution (and no prosecution for ownership), with low risk relative to potential profit. 129 In a 2011 report, IFAW noted that well-connected traffickers could evade prosecution, and the low priority of wildlife crime in the legal system resulted in a lower conviction rate for wildlife trafficking. 130
- Allegations of official involvement in trafficking: There have been allegations of official involvement in the wildlife trade and in the consumption of wildlife products. EIA undercover investigators have found evidence pointing to Chinese officials as a significant consumer demographic of products from Asian big cats. Similarly, in its investigation of the rhino horn trade, EAL discovered one case in which Chinese law enforcement personnel themselves engaged in the consumption of wildlife products. There are also

^{*} Due to weak law enforcement in northern Burma and close proximity to demand in China, Asian elephants in Burma are increasingly poached for their skin by organized networks. Between March 2015 and August 2017, more than 40 elephants were poached. The total Burmese elephant population—one of the largest remaining Asian elephant populations—is estimated between 1,400 and 2,000 elephants. Elephant skin is thought to treat skin ailments and sometimes used as jewelry. Justine E. Hausheer, "Poachers Are Killing Asian Elephants for Their Skin," *Nature*, May 21, 2018. https://blog.nature.org/science/2018/05/21/poachers-are-killing-asian-elephants-for-their-skin/; Christie Sampson et. al., "New Elephant Crisis in Asia—Early Warning Signs from Myanmar," *PLOS One*, March 13, 2018. https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0194113.

[†] These images could identify the animal's origin by comparing skins against images from the Indian government's stripe pattern profile database. The database collects photos of tigers taken in the wild across India, Nepal, and Bangladesh. Environmental Investigation Agency, "Major Big Cat Skins Seizure a Chance to Disrupt Traffickers," November 4, 2016. https://eia-international.org/major-big-cat-skins-seizure-chance-disrupt-traffickers.

reports of official involvement in ivory trafficking from Tanzania to China in the past. EIA reported that according to Tanzanian ivory traders, during President Xi's visit to Tanzania in 2013, the government and business delegation that accompanied him purchased ivory and transported it back to China on the president's airplane using diplomatic bags. They also said the amount of ivory purchased was so large the local price increased. ¹³³ Both the government of Tanzania and China denied the allegations. ¹³⁴

Potential Success Story: Ivory

The U.S.-China ivory ban represents a positive development in the fight against wildlife trafficking. In its implementation of the near-complete ban on trade in ivory, as of January 2018, the Chinese government shut down all 34 ivory carving factories and 143 retail outlets previously licensed to trade in ivory. Preliminary assessments indicate the ban has had a positive impact, demonstrating the importance of credible enforcement and the abolition of the legal trade. Before the ban, the Chinese government enacted policies to regulate the legal domestic ivory trade; however, the legal trade—as well as CITES' decision to hold two stockpile sales—unintentionally supported ivory trafficking. The final 2018 ivory ban grew from a confluence of multiple factors: the clear failure of the legal domestic trade regulations; international pressure, particularly from elephant range countries; nonprofits working with the government to build political will; broader state policies against corruption; and joint policy coordination with the United States.

Before 2008, demand for ivory in China had been relatively controlled. When China acceded to CITES, it adopted the ban on international trade in Asian elephant ivory, extended to African elephant ivory in 1991. At that point, ivory-carving workshops—mostly government owned—stopped taking apprentices and reduced their production; and elephant populations began to recover in Africa. Is CITES allowed ivory stockpiles to be sold in 2008, however, under the assumption that "flooding the market" would decrease the price of ivory. Instead, those sales backfired, removing the stigma on ivory ownership and generating new demand for ivory: economic research has shown the post-2008 increase in elephant poaching likely originated from the legal ivory stockpile sale.

The presence of a legal domestic trade in ivory fueled an increase in demand, harming China's international image. SFA and the State Administration of Industry and Commerce had instituted an ivory registry to license carving workshops and retail outlets in 2004 to meet CITES' requirements for the purchase of stockpiled ivory. Instead of moderating the trade, legal regulation became a cover for black market outlets and trafficked products laundered in licensed stores, while further stimulating demand. IFAW reported the wholesale price of ivory in China tripled between 2006 and 2011. In this period, the Chinese currency appreciated against the U.S. dollar, strengthening the purchasing power of Chinese ivory traffickers in overseas markets smuggling ivory to China. In This demand harmed China's image in elephant range countries: in 2014, a Chinese Embassy spokesman in Tanzania said the embassy worried constantly about Chinese citizens arrested on suspicion of smuggling. A 2013 joint report by CITES, the UN Environment Program, the International Union for Conservation of Nature, and TRAFFIC stated: Nowhere is the need for demand reduction [in illegal ivory] more critical than in China.

To combat the trade, academic researchers studied drivers of demand and NGOs examined demand reduction through various consumer surveys and public education campaigns. Studies identified several target ivory consumer groups: antique collectors and art investors, overseas tourists, business people, and users of traditional Asian medicine. If a early 2013, IFAW published an evaluation of its public service announcement, "Mom, I Have Teeth"; after viewing the public service announcement, which showed that elephants were killed in the process of taking ivory, the share of past ivory purchasers saying they would subsequently avoid buying ivory increased from

^{*} In July 2014, China's then-Ambassador to Tanzania Lu Youqing stated in an interview that the embassy became tense whenever Tanzania announced an ivory seizure. Mimi Lau, "Bad Apples in Africa: Chinese Traders' and Companies' Behavior Worries Envoy," South China Morning Post, July 14, 2014. https://www.scmp.com/news/china/article/1553617/bad-apples-africa-chinese-traders-and-companies-behaviour-worries-envoy.

33 to 66 percent. A similar survey by *National Geographic* reported the top ivory purchase deterrents: for the government to make it illegal under any circumstance, or the strong recommendation of a government leader.

China and the United States began to take joint action: in November 2013, the U.S. Fish and Wildlife Service destroyed 6 tons of ivory in Denver. ¹⁵¹ Two months later, Chinese officials destroyed 6.1 tons of ivory in Guangdong. ¹⁵² Finally, at the end of 2017, in accordance with a 2015 agreement with then President Obama, China's remaining domestic ivory markets closed, including all previously licensed vendors and carving facilities. ¹⁵³ Consumer research and education helped galvanize public support and build political will for the ivory ban. The ban also received significant support from high-level dialogues with then President Obama. ¹⁵⁴ The ban was gradual in its implementation: by the end of March 2017, a third of the retailer and carving workshops closed, and commercial trade ended after December 2017. ¹⁵⁵

Early indicators show signs of the ban's success following implementation. A number of conservationists have reported a drop in the price of ivory within China, suggesting an initial positive outcome. ¹⁵⁶ A 2017 GlobeScan survey of top Chinese ivory markets indicated about 31 percent of urban consumers are "borderline" purchasers who would be deterred by a complete ban and associated punitive measures. ¹⁵⁷ Even some "die-hard" consumers (about 19 percent of urban consumers surveyed) would reconsider ivory purchase. ¹⁵⁸ After hearing of the ban, the share of survey respondents who reported an intention to purchase ivory fell from 43 to 18 percent. ¹⁵⁹

Though the price has declined and it is now illegal to openly purchase ivory in China, Chinese tourists to Japan, Vietnam, Laos, and Burma can still purchase ivory. ¹⁶⁰ In addition, a recent EIA report showed that ivory smuggling operations were continuing through February 2017. ¹⁶¹ The continued presence of valuable stockpiled ivory may also pose a potential risk. ¹⁶² These remaining challenges may be addressed by a range of possible actions explored in concluding remarks.

The various conditions that brought about the ban on ivory could be replicated to eliminate markets in other endangered species.

Continuing Challenge: Tiger Products

In contrast to the Chinese government's policy on trafficking ivory, the case of tiger products illustrates the problems with captive breeding of wildlife, a government-sanctioned practice that provides cover for the illegal trade in wild tiger and other big cat products.* The continued relevance of these challenges is highlighted by an October 2018 State Council notification announcing the legalization of tiger products for controlled uses such as medical research.¹⁶³

Initially, demand in China for tiger products was also contained. In 1993, following international pressure, China's State Council issued a circular banning the trade in tiger bones and rhino horns.^{† 164} Subsequently, the Chinese government conducted a campaign involving public education, support for tiger bone medicinal alternatives, and markedly increased seizures of tiger products, including tiger skins.¹⁶⁵ These efforts yielded great success. Surveys

^{*} The search for alternatives to tiger bone has led to the poaching of other big cats. See Environmental Investigation Agency, "Chinese Government Permitting Commercial Trade in the Bones of Threatened Leopards," May 25, 2018. https://eia-international.org/chinese-government-permitting-commercial-trade-bones-threatened-leopards.

[†] International pressure took at least two forms. First, in March 1993 the CITES Standing Committee expressed concern over "continuing commerce in rhinoceros horns" and the poaching and smuggling of tiger parts "to sustain markets for traditional medicines" and called for authorities in China, Korea, Yemen, and Taiwan to "take measures to halt the illegal trade." Subsequently, in May 1993 the United States "certified" China and Taiwan under the Pelly Amendment to the Fisherman's Protective Act, where then Secretary of State Bruce Babbitt determined that "actions of citizens of another country undermine the effectiveness of an international mechanism to protect endangered species, such as CITES," which authorized the imposition of trade sanctions. China's State Council issued the circular in May 1993. J. A. Mills, ed., "Rhinoceros Horn and Tiger Bone in China: An Investigation of Trade since the 1993 Ban," TRAFFIC, 1997. http://www.trafficj.org/publication/97_Rhinoceros_Horn_and_Tigar_Bone_in_China.pdf.

conducted by TRAFFIC in 2005 and 2006 found that tiger bone was largely unavailable for sale in China, and there was a widespread awareness of the protected status of tigers and the government's trade ban. ¹⁶⁶ In 2007, following the publication of TRAFFIC's findings, the organization's executive director stated that "the tiger survives today thanks in large part to China's prompt, strict, and committed action." ¹⁶⁷

However, in the 2000s a tiger parts and products trade reemerged in China supported by gray areas in Chinese law. The first captive-bred tiger farm was established in China in 1986; by 2006, captive-bred tigers in China numbered more than 4,000. Today there are between 5,000 and 6,000 captive-bred tigers in China. In 2003, SFA and the State Administration of Industry and Commerce launched the "wildlife utilization and marking system" wherein registered companies received permits to process tiger pelts. In addition, Chinese companies point to the existence of a Chinese government notification issued in 2005 regarding a pilot program permitting captive-bred tiger bone to be used for medicine. This notification is not publicly available, but at least as of 2013 some Chinese companies perceived the use of captive-bred tiger bone for medicinal purposes to be legal. More recently, on October 29, 2018, China's State Council partially reversed the 1993 ban against rhino horn and tiger bone. New regulations permit captive-bred products' controlled use in scientific research and education, medical research and treatment, and cultural relics. Though these new regulations' implementation has been delayed, activists remain worried; multiple NGOs issued statements urging the Chinese government to continue to uphold the permanent ban. Secondary of a legal market would undercut efforts to protect these species.

In China, captive breeding and the permit system have conflicted with efforts to diminish the trade in tiger products. ¹⁷⁷ EIA explains that "a legal trade in tiger parts and products maintains and stimulates demand, complicates law enforcement, and undermines efforts to reduce demand for tiger products." ¹⁷⁸ Tiger farms have made tiger products desirable and incentivized the poaching of wild tigers, because doing so is less expensive than breeding tigers and commands higher prices from consumers who often prefer products made from wild tigers, thus yielding greater profits. ¹⁷⁹ Notably, the growth in tiger farming in China has spurred the sale of tiger bone wine. ¹⁸⁰ Legalized trade in tiger products also provides an opportunity to launder trafficked tiger products. ¹⁸¹ EIA identified two tiger trade hubs where the sale and processing of wild and captive-bred tiger parts occurred together. ¹⁸² In addition, EIA reported that Chinese companies are maintaining stockpiles of tiger bones after processing them, showing speculation about a future legal trade in tiger bones. ¹⁸³

China has defended its position on captive breeding at CITES. As previously mentioned, CITES' non-binding guidance regarding both the domestic trade in tiger parts and captive breeding programs cannot address this issue, since CITES only governs international trade. The Chinese government did not implement the 2007 CITES decision, arguing CITES cannot regulate China's domestic wildlife trade. ¹⁸⁴ The government also argued that farming CITES-listed species reduces hunting and helps conserve the species in the wild. ¹⁸⁵ However, China's prior challenges controlling the legal ivory trade contradict this argument. As Ms. Kinnaird explained after the move to loosen the ban on rhino horns and tiger bone, "Not only could this lead to the risk of legal trade providing cover to illegal trade, this policy will also stimulate demand that had otherwise declined since the ban was put in place." ¹⁸⁶

Considerations for Congress

The U.S. interest in halting the illegal wildlife trade stems from three primary concerns: (1) the protection of critically endangered species and biodiversity, (2) the diversion of revenue away from international criminal organizations and militant groups, and (3) the eradication of corruption facilitating a variety of illicit supply chains.

1. *Species conservation:* Greater demand for wildlife products has accelerated the decline of iconic species and environmental degradation. The western black rhino and northern white rhino are now considered extinct in the wild; ¹⁸⁷ African elephant survival was estimated at about 10–15 years in 2014, given an annual

- population decline of 7 percent;¹⁸⁸ and tiny porpoises known as vaquitas* face certain extinction, with fewer than 12 currently left on the planet.¹⁸⁹
- 2. *Diverting revenue:* The United States has an ongoing interest in disrupting illicit supply chains that fund militant groups and criminal organizations. Wildlife trafficking revenue estimates range from \$7 billion to \$23 billion annually, one of the top illicit trades after weapons, narcotics, and human trafficking. The retail value of ivory alone increased from \$5.77/kilogram in 1976 to over \$3,000/kilogram in 2014. Because of ivory's value, some militaries and armed groups—including the Lord's Resistance Army and Janjaweed—reportedly engage in this trade as traders or poachers. Poachers rely on transnational criminal syndicates to ship contraband overseas into areas of high demand. These syndicates target a variety of species, including elephants, tigers, apes, exotic birds, and reptiles.
- 3. *Eradicating corruption:* To pass through borders and customs enforcement, wildlife trafficking depends on official corruption. Corruption undermines the rule of law, government effectiveness, and public trust in government institutions, and it often involves or facilitates violence. ¹⁹⁴ In addition, according to INTERPOL, the State Department, and the UN Office of Drugs and Crime the same routes and porous borders used to traffic wildlife are often used to traffic weapons, drugs, and people. ¹⁹⁵

To promote these interests, some considerations are explored below.

U.S. Domestic Considerations

- *Private tiger ownership:* As noted by officials at the State Department, as in the case of ivory, the Chinese government may expect reciprocal action by the U.S. government to combat wildlife trafficking. ¹⁹⁶ Approximately 5,000 privately owned tigers live in the United States. ^{‡ 197} Congress could consider whether to document or federally regulate the U.S. domestic tiger population, or to support the proposed Big Cat Public Safety Act legislation and ban private tiger ownership. § Furthermore, just as joint public destruction of ivory took place in the United States and China, the U.S. government could conduct public destruction of confiscated tiger products. ¹⁹⁸
- U.S. advocacy at CITES and international fora: According to officials at the Department of the Interior, the United States has long held concerns of fraud and abuse associated with claims of captive breeding of CITES-listed species. 199 U.S. CITES representatives could advocate for the elimination of loopholes that allow endangered wild and captive-bred animals to be traded domestically for purposes other than conservation. U.S. CITES representatives could also encourage other countries (e.g., the EU and Japan) to close their domestic ivory markets to reinforce the China-U.S. joint action. The United States could also

^{*} Vaquitas are near extinction due to illegal fishing of the totoaba, prized for its swim bladder. Once the totoaba's high retail value became widely known in 2014, organized criminal networks vied for control of the trade. United Nations Environment Program Wild for Life Campaign, "Goodbye, Vaquitas: A Call to Prevent Mass Extinction," July 13, 2018. https://wildfor.life/goodbye-vaquitas-a-call-to-prevent-mass-extinction; Mary Utermohlen and Patrick Baine, "In Plane Sight: Wildlife Trafficking in the Air Transport Sector," Center for Advanced Defense Studies and USAID-ROUTES, August 2018, 12–13. https://routespartnership.org/industry-resources/publications/in-plane-sight/view

[†] According to the UN Environment Program, these militias' annual ivory revenue in the Sub-Saharan region was likely between \$4 million and \$12.2 million in 2014, given estimates of elephants killed in their territory. Christian Nellemann et al., "The Environmental Crime Crisis – Threats to Sustainable Development from Illegal Exploitation and Trade in Wildlife and Forest Resources," *United Nations Environment Programme and GRID-Arendal*, 2014, 8. https://www.cbd.int/financial/monterreytradetech/unep-illegaltrade.pdf.

[‡] The exact number of tigers in the United States is unknown, and regulations differ by jurisdiction. In October 2011, a man released more than ten tigers in Zanesville, Ohio, where they were shot by first responders. World Wildlife Fund, "More Tigers in American Backyards than in the Wild," July 29, 2014. https://www.worldwildlife.org/stories/more-tigers-in-american-backyards-than-in-the-wild.

[§] The Big Cat Public Safety Act, H.R. 1818, was introduced in late March 2017 by representatives Jeff Denham, Walter Jones, and Niki Tsongas. It would amend the Lacey Act Amendments to "prohibit any person from breeding or possessing prohibited wildlife species (i.e., any live species of lion, tiger, leopard, cheetah, jaguar, or cougar or any hybrid of such species)." The Big Cat Public Safety Act, H.R. 1818, March 30, 2017. https://www.congress.gov/bill/115th-congress/house-bill/1818.

advocate for compliance measures in the implementation of parties' ivory regulations. In addition, disagreement has arisen on the trade of CITES-listed wildlife products now held in government stockpiles that pre-date species' restricted status.* U.S. representatives at CITES could support the existing CITES interpretation that these products not be sold. Lastly, it could call for more action to combat wildlife trafficking at other international fora like the UN Convention against Transnational Crime, the UN Convention against Corruption, the UN General Assembly, and the G7.

• Data collection: Various researchers have described weaknesses in CITES trade data.²⁰⁰ The reporting speed, accuracy, and specificity of these data could be improved to assist conservation efforts. The Fish and Wildlife Service's LEMIS system could set an excellent example of how to track trade in all animal species, not only CITES-listed species. LEMIS is praised for species-level classification of all traded animals regardless of protection status; however, LEMIS data are only accessible through a Freedom of Information Act request, as the data identify particular individuals and firms.²⁰¹

Working-Level Bilateral Considerations

- Tourist education: According to multiple researchers, Chinese tourists find wildlife products readily available when traveling in many Burmese, Vietnamese, and Laotian towns dotting China's southern border. Discrete Similarly, U.S. tourists may also find opportunities available to visit and thus inadvertently encourage tiger zoos, temples, and other sites that may contribute to trafficking. An opportunity exists to conduct joint educational initiatives targeting Chinese and U.S. tourists: since both consumer groups may encounter trafficked wildlife products abroad, tourism education initiatives are one way governments and NGOs have sought to address that particular source of demand. The U.S. Wildlife Trafficking Alliance and the Chinese Tourism Administration have already developed separate materials to this end. Discrete Products and P
- *E-commerce and couriers:* Advances in addressing wildlife trafficking online are underway thanks to private companies and nonprofits, and increased governmental online and courier enforcement could help shut down wildlife product markets. ²⁰⁴ On March 7, 2018, 21 tech companies created the Global Coalition to End Wildlife Trafficking Online, including Tencent, Facebook, Alibaba, eBay, Google, Baidu, Instagram, and Pinterest. ²⁰⁵ TRAFFIC, IFAW, and the World Wildlife Fund will collaborate with each company to develop coordinated policies to address wildlife crime. ²⁰⁶
- Anti-money laundering: Prosecuting money laundering and other economic crimes associated with wildlife trafficking helps dismantle the environment allowing it to flourish and creates a more effective deterrent. In October 2016, CITES recommended the incorporation of anticorruption efforts, including anti-money laundering, into efforts to counter wildlife trafficking. The multilateral Financial Action Task Force encourages countries to consistently undertake a "parallel financial investigation when pursuing money laundering, associated predicate offenses, and terrorist financing." U.S. government agencies have begun to target money laundering in wildlife trafficking cases. In January 2018, the U.S. Department of the Treasury Office of Foreign Assets Control sanctioned Zhao Wei, the director of the Kings Romans Casino, and associated individuals and entities for their engagement in drug, human, and wildlife trafficking, money laundering, and bribery. ^{‡ 210} Chinese government counterparts might contribute to these efforts bilaterally

^{*} Chinese government stockpiles of pangolin scales "can be used in traditional Chinese medicine" when appropriately labelled and can be purchased in "700 designated hospitals." Mingxia Zhang et al., "Illegal Pangolin Trade in Northernmost Myanmar and its Links to India and China," Global Ecology and Conservation 10 (2017): 24. https://www.sciencedirect.com/science/article/pii/S2351989416300944.

[†] Specific towns and cities include Mong La in Burma; Boten, Luang Prabang, and Vientiane in Laos; and towns near Hanoi in northern Vietnam.

[‡] In an undercover investigation, EIA documented offerings of trafficked CITES-listed products like tiger skins and meat and pangolin dishes. Environmental Investigation Agency, "Blacklisted! An End in Sight to Laos' Sin City Illegal Wildlife Supermarket?" January 31, 2018. https://eia-international.org/blacklisted-end-sight-laos-sin-city-illegal-wildlife-supermarket; U.S. Department of the Treasury, Treasury Sanctions the Zhao Wei Transnational Criminal Organization, January 30, 2018. https://home.treasury.gov/news/press-releases/sm0272.

- and multilaterally in the Financial Action Task Force, emphasizing the importance of targeting the flows of proceeds from wildlife trafficking through anti-money laundering techniques.
- Exchanges for professors and students: SFA is known to approach issues of wildlife from the perspective
 of resource management rather than conservation. Dr. Peter Li noted that the creation of a program for
 professors and students from Chinese forestry universities to conduct exchanges in the United States might
 encourage SFA toward a focus on wildlife conservation rather than the management of wildlife as a resource
 for human benefit.²¹¹

High-Level Bilateral Considerations

- *High-level bilateral discussions:* According to State Department officials and multiple other actors, the importance of high-level attention to wildlife trafficking cannot be understated, and has greatly assisted in achieving joint U.S.-China action on ivory.²¹²
- Pressure on Chinese border enforcement: As Oxford Brookes University professor Vincent Nijman pointed out, wildlife trafficking is not only the removal of an animal from the wild; it may also entail bribery, extortion, tax evasion, and crimes against state property. In its report, EAL described corruption along China's southern border as "substantial," where "taking bribes is standard practice." Anticorruption efforts are needed to better enforce China's borders, particularly its southern border. These efforts can dismantle the environment in which wildlife trafficking occurs. For example, when Thai authorities tightened border security on Thailand's northern border with Burma, the wildlife market in the Burmese border town of Tachileik disappeared. Its

Congress has enacted substantial legislation dedicated to wildlife protection and conservation as a result of the three interests stated above. The International Conservation Caucus summarized these concerns, stating, "Reckless mismanagement of resources around the world can cause conflict with international consequences, many of which directly oppose American interests and security." If joint action is not taken, the world stands to lose many of its most iconic species, which will pass into legend for future generations.

Appendix: U.S. Policies and Efforts to Counter International Wildlife Trafficking

The U.S. government has enacted a series of laws to comply with CITES and pursue the three aforementioned policy aims: (1) the protection of critically endangered species and biodiversity, (2) the diversion of revenue away from international criminal organizations and militant groups, and (3) the eradication of corruption facilitating a variety of illicit supply chains. These aims have been incorporated into U.S. law through legislation in Table 2.

Table 2: Select U.S. Legislation to Counter Wildlife Trafficking and Implement CITES

Date		
Enacted	Law Title	Law's Stated Purpose
1900	Lacey Act	Under the Lacey Act, it is illegal to "import, export, sell, acquire, or purchase fish, wildlife or plants that are taken, possessed, transported," or otherwise sold: (1) in violation of U.S. law, or (2) in interstate or foreign commerce involving any fish, wildlife, or plants taken, possessed, or sold in violation of state or foreign law. The law covers fish, wildlife, their parts and products, and plants protected by CITES or by state law.
1972	Marine Mammals Protection Act	This act aims to conserve marine mammal populations by establishing a moratorium on the killing of marine mammals in U.S. waters and by U.S. nationals on the high seas.
1973	Endangered Species Act (ESA)	The United States' primary legislation regarding endangered species, ESA implements CITES and contains provisions for protecting rare foreign species.
1978	Pelly Amendment, Section 8 of the Fisherman's Protective Act	The Pelly Amendment authorizes the president to embargo wildlife products if the secretary of the interior or the secretary of commerce certifies foreign nationals "are engaging in trade or taking that diminishes the effectiveness of an international program in force with respect to the United States for the conservation of endangered or threatened species."
1988	African Elephant Conservation Act	This act builds upon ESA to protect African elephant species in the wild. It was introduced to comply with CITES in an effort to conserve this species, under threat by the illegal trade of ivory.
1994	Rhinoceros and Tiger Conservation Act	This act builds upon ESA to protect these species in the wild. It was introduced to comply with CITES in an effort to conserve these species and reduce the trade in rhino and tiger parts.
1997	Asian Elephant Conservation Act	This act builds upon ESA to protect these species in the wild. It was introduced to comply with CITES.
2000	Great Ape Conservation Act	This act builds upon ESA to protect great ape species in the wild. It was introduced to comply with CITES. Protected species include the chimpanzee, gorilla, bonobo, orangutan, and gibbon.
2004	Marine Turtle Conservation Act	This act builds upon ESA to protect global species of marine turtles. Protected species include loggerhead, green, olive ridley, leatherback, Kemp's ridley, and hawksbill turtles.

		This act directs the secretary of state, in consultation with the secretary of the
	Eliminate,	interior and the secretary of commerce, to submit to Congress a report that lists
	Neutralize, and	focus countries and countries of concern. It then directs 17 federal agencies to
	Disrupt (END)	implement the U.S. national strategy to combat wildlife trafficking. The strategy
	Wildlife	targets three priorities: (1) strengthen enforcement, (2) reduce demand for
2016	Trafficking Act	trafficked wildlife, and (3) build international cooperation.

Source: Various.217

U.S. government enforcement efforts with regard to international wildlife trafficking consist of investigations, participation in multilateral enforcement operations, prosecutions, and law enforcement capacity building among international partners (see Table 3). The U.S. government coordinates its efforts to counter international wildlife trafficking through an interagency task force established by presidential executive order in 2013. The Departments of Interior, Justice, and State jointly chair the task force.²¹⁸

Table 3: Select Recent U.S. Government Enforcement Initiatives (and Multilateral Initiatives with U.S. Government Participation) Focused on Countering Wildlife Trafficking

Dates	Operation Name	Description	Results
May 1–31, 2018	Operation Thunderstorm	A multilateral operation coordinated by INTERPOL and the World Customs Organization. 92 countries participated.	Resulted in 1,974 seizures worldwide, including 1.4 short tons of elephant ivory, 27,000 reptiles, and almost 4,000 birds. Around 1,400 suspects identified, which led to arrests and investigations.
2011– Present	Operation Crash	A nationwide initiative targeting the trafficking of rhino horn and elephant ivory. It is led by the Fish and Wildlife Service and U.S. Department of Justice.	As of September 2017, more than 50 individuals and companies had been charged, with sentences totaling more than 36 years, more than \$2.1 million in fines, and \$5.7 million in forfeiture and restitution.
2017	Operation Jungle Book	An initiative led by the Fish and Wildlife Service targeting the trafficking of wildlife, including a tiger, monitor lizards, turtles, cobras, several coral species, and Asian songbirds.	Federal charges brought against 16 individuals.
January 30– February 19, 2017	Operation Thunderbird	A multilateral operation led by INTERPOL in which 48 countries participated.	Resulted in 1,300 seizures worldwide, including more than 2,800 reptiles, 5,200 birds, and 4.3 short tons of pangolin scales. Almost 900 suspects identified. The operation led to 390 investigations and jail time for 88 individuals.

Source: Various.²¹⁹

After the National Strategy for Combating Wildlife Trafficking was implemented in 2015, many U.S. government efforts to counter wildlife trafficking have been organized under its framework. Beyond investigations like Operation Crash, U.S. government efforts in this strategy have included building technical capacity, reducing

demand through public outreach and education, and sharing information and conducting supply chain analysis. Examples of these activities are listed in Table 4.

Table 4: Select U.S. Government Initiatives (and Multilateral Initiatives with U.S. Government Participation) Conducted under the National Strategy for Combating Wildlife Trafficking

Initiative Type	Initiative Description
Collaboration with the Commercial Targeting and Analysis Center	Eleven federal agencies joined U.S. Customs and Border Protection to share information on border enforcement and cargo identification through its Commercial Targeting and Analysis Center.
Capacity building with multilateral organizations	The State Department conducted more than 50 capacity-building sessions in conjunction with CITES, the UN Office on Drugs and Crime, INTERPOL, and other multilateral organizations.
Capacity-building support	USAID supported 60 diverse programs internationally to provide technical equipment and training as well as support enforcement and improvement in national legal frameworks.
Demand reduction: ivory crush	The Fish and Wildlife Service conducted its second ivory crush in New York City, destroying nearly a ton of worked ivory.
Demand reduction: public outreach	The U.S. embassy in Vietnam, together with the governments of Vietnam and South Africa, launched Operation Game Change, a public outreach event focused on reducing rhino horn consumption.
Demand reduction: public education	USAID supported public service announcements created in conjunction with international NGOs, reaching 23 million Chinese people daily.
Supply chain analysis	USAID, the State Department, the Fish and Wildlife Service, and the U.S. Department of Homeland Security collaborated with the private sector and NGOs in "Reducing Opportunities for the Unlawful Transport of Endangered Species" (ROUTES) to improve supply chain data and analysis to better track and detect wildlife trafficking.
Supply chain detection	USAID supported NGO work to meet with transportation agencies, customs agents, and government and NGO representatives and produce recommendations for transport companies.

Source: National Strategy for Combating Wildlife Trade Task Force, 2015 Annual Progress Assessment, 2015. https://www.justice.gov/enrd/file/830352/download.

Endnotes

¹ Convention on International Trade in Endangered Species of Wild Fauna and Flora, "Wildlife Crime." https://www.cites.org/prog/iccwc.php/Wildlife-Crime.

² U.S. Fish and Wildlife Service International Affairs, Wildlife Trafficking, https://www.fws.gov/international/wildlife-trafficking/.

- ³ Rachel Nuwer, "The Key to Stopping the Illegal Wildlife Trade: China," *New York Times*, November 19, 2018. https://www.nytimes.com/2018/11/19/science/wildlife-trafficking-china.html; Xinhua, "Full Transcript: State Council Executive Deputy Secretary-General Ding Xuedong Answers Media Questions," November 12, 2018. http://www.china.org.cn/china/Off_the_Wire/2018-11/12/content_71941870.htm?from=groupmessage&isappinstalled=0.
- ⁴ Environmental Investigation Agency, "Uncertainty for Tigers under China's New Wildlife Law," July 6, 2016. https://eia-international.org/uncertainty-for-tigers-under-chinas-new-wildlife-law/.
- ⁵ World Wildlife Fund, "WWF Statement on China's Legalization of Domestic Trade in Tiger Bone and Rhino Horn," October 29, 2018. http://wwf.panda.org/wwf_news/press_releases/?337353/WWF-statement-on-Chinas-legalization-of-domestic-trade-in-tiger-bone-and-rhino-horn.
- ⁶ Convention on International Trade in Endangered Species of Wild Fauna and Flora, "How CITES works," https://www.cites.org/eng/disc/how.php.
- ⁷ Convention on International Trade in Endangered Species of Wild Fauna and Flora, "What Is CITES?" https://www.cites.org/eng/disc/what.php.
- 8 John C. Nagle, "Why Chinese Wildlife Disappears as CITES Spreads," Georgetown Environmental Law Review 9:435 (1997): 436. https://scholarship.law.nd.edu/law_faculty_scholarship/818/.
- Onvention on International Trade in Endangered Species of Wild Fauna and Flora, "Res 9.13," 1994. https://cites.org/sites/default/files/eng/cop/09/E9-Res.pdf.
- 10 Convention on International Trade in Endangered Species of Wild Fauna and Flora, "Captive Bred and Ranched Specimens," 2007. https://www.cites.org/eng/dec/valid17/81842.
- ¹¹ Environmental Investigation Agency, "Hidden in Plain Sight: China's Clandestine Tiger Trade," February 2013, 23. https://eia-international.org/wp-content/uploads/EIA-Hidden-in-Plain-Sight-med-res.pdf.
- ¹² Convention on International Trade in Endangered Species of Wild Fauna and Flora, "Decisions of the Conference of the Parties to CITES in Effect after the 17th Meeting." https://www.cites.org/eng/dec/index.php.
- ¹³ Environmental Investigation Agency, interview with Commission staff, April 26, 2018; TRAFFIC, "New Report Finds No Slowdown in Tiger Trafficking," September 29, 2016. http://www.traffic.org/home/2016/9/28/new-report-finds-no-slowdown-in-tiger-trafficking.html; Environmental Investigation Agency, "Hidden in Plain Sight: China's Clandestine Tiger Trade," February 2013, 22. https://eia-international.org/wp-content/uploads/EIA-Hidden-in-Plain-Sight-med-res.pdf; Convention on International Trade in Endangered Species of Wild Fauna and Flora, "Conservation of and Trade in Tigers and Other Appendix I Asian Big Cat Species."
 https://www.cites.org/sites/default/files/document/E-Res-12-05-R17.pdf.
- ¹⁴ Convention on International Trade in Endangered Species of Wild Fauna and Flora, "Resolution Conf. 17.7: Review of Trade in Animal Specimens Reported as Produced in Captivity." https://cites.org/sites/default/files/document/E-Res-17-07.pdf.
- ¹⁵ Environmental Investigation Agency, "Cultivating Demand: The Growing Threat of Tiger Farms," November 2017, 6. https://eia-international.org/report/cultivating-demand-growing-threat-tiger-farms; Rachel Bale, "The World Is Finally Getting Serious about Tiger Farms," National Geographic, September 29, 2016. https://news.nationalgeographic.com/2016/09/wildlife-watch-tiger-farms-cites-protections/.
- ¹⁶ Beth Walker, "Short Term Policy Brief 95: China's Efforts to Wipe out the Trade in Endangered Species," *Europe China Research and Advice Network*, August 2014.
 - http://eeas.europa.eu/archives/docs/china/docs/division_ecran/ecran_is_119_paper_95_chinas_efforts_to_wipe_out_the_trade_in_enda ngered_species_beth_walker_en.pdf; International Fund for Animal Welfare, "Criminal Nature: The Global Security Implications of the Illegal Wildlife Trade," June 2013, 9. https://s3.amazonaws.com/ifaw-pantheon/sites/default/files/legacy/ifaw-criminal-nature-UK.pdf.
- 17 TRAFFIC, "Monitoring of Illegal Trade in Ivory and Other Elephant Specimens," ETIS Report of TRAFFIC at the Convention on International Trade in Endangered Species of Wild Fauna and Flora, March 2013, 14. https://www.cites.org/sites/default/files/eng/cop/16/doc/E-CoP16-53-02-02.pdf.
- ¹⁸ Nikkita Gunvant Patel et al., "Quantitative Methods of Identifying the Key Nodes in the Illegal Wildlife Trade Network," *Proceedings of the National Academy of Sciences of the United States of America*, 112:26 (June 2015): 7950. https://www.ncbi.nlm.nih.gov/pubmed/26080413.
- ¹⁹ U.S. Department of State, Report to Congress on Eliminate, Neutralize, and Disrupt Wildlife Trafficking Act of 2016 PL 114-231, Sec. 201, November 16, 2017. https://www.state.gov/e/oes/rls/rpts/275703.htm.
- ²⁰ U.S. Government Accountability Office, Combating Wildlife Trafficking: Agencies Are Taking Action to Reduce Demand but Could Improve Collaboration in Southeast Asia, October 2017, 15. https://www.gao.gov/assets/690/687709.pdf.
- ²¹ Brian Handwerk, "In a Horrifying Twist, Myanmar Elephants Are Being Poached for Their Skin," *Smithsonian Magazine*, March 20, 2018. https://www.smithsonianmag.com/science-nature/myanmar-elephants-are-being-poached-their-skin-not-tusks-180968535/. Rachael Bale, "China Shuts down its Legal Ivory Trade," *National Geographic*, December 30, 2017.

https://news.nationalgeographic.com/2017/12/wildlife-watch-china-ivory-ban-goes-into-effect/; Jeremy Hsu, "The Hard Truth about the Rhino Horn 'Aphrodisiac' Market," Scientific American, April 5, 2017. https://www.scientificamerican.com/article/the-hard-truth-about-the-rhino-horn-aphrodisiac-market/; Sharon Guynup, "As Asian Luxury Market Grows, a Surge in Tiger Killings in India," Yale Environment 360, January 10, 2017.

https://e360.yale.edu/features/as_chinese_luxury_market_grows_upsurge_in_tiger_poaching_india; Jani Actman, "Inside the Disturbing World of Bear-Bile Farming," National Geographic, May 5, 2016. https://news.nationalgeographic.com/2016/05/160505-asiatic-bear-bile-trade-laos/; Rashid H. Raza et al., "Illuminating the Blind Spot: A Study on the Illegal Trade in Leopard Parts in India (2001-2010)," TRAFFIC, 2012, 7. http://www.traffic.org/home/2012/9/28/four-leopards-a-week-enter-indias-illegal-wildlife-trade.html; Neil D'Cruze and David W. Macdonald, "Clouded in Mystery: The Global Trade in Clouded Leopards," Biodiversity Conservation 24 (2015): 3505–3507; Kristin Nowell et al., "An Ounce of Prevention: Snow Leopard Crime Revisited," TRAFFIC, October 2016, x, xii, 9. http://static1.1.sqspcdn.com/static/f/157301/27298294/1476983224237/Snow-Leopard-

Report.pdf?token=v2auWFyMl%2FfYbb110gud11BHJFA%3D; Christina Vallianos, "Pangolins on the Brink," WildAid, September 2017, 8. http://wildaid.org/wp-content/uploads/2017/09/WildAid-Pangolins-on-the-Brink.pdf; Dan Levin, "China Weighs Ban on Manta Ray Gills, Sold in Traditional Markets as Modern Panacea," New York Times, January 6, 2016.

https://www.nytimes.com/2016/01/07/world/asia/china-manta-ray-conservation.html?login=email&auth=login-email; Louis Sahagun, "Big Spenders in China Are Targeting U.S. Species of Turtles and Tortoises as Collector's Items and Cuisine," Los Angeles Times, June 5, 2017. http://www.latimes.com/local/california/la-me-turtle-black-market-china-20170604-story.html; Craig B. Stanford et al., "Manouria emys (Schlegel and Müller 1840) – Asian Giant Tortoise, Giant Asian Forest Tortoise," Conservation Biology of Freshwater Turtles and Tortoises: A Compilation Project of the IUCN/SSC Tortoise and Freshwater Turtle Specialist Group, February 24, 2015, 0.86.6. http://www.iucn-tftsg.org/wp-content/uploads/file/Accounts/crm_5_086_emys_v1_2015.pdf.

- ²² International Fund for Animal Welfare, "Going... Going... Gone!" 2012.
- ²³ Jeremy Hsu, "The Hard Truth about the Rhino Horn 'Aphrodisiac' Market," *Scientific American*, April 5, 2017. https://www.scientificamerican.com/article/the-hard-truth-about-the-rhino-horn-aphrodisiac-market/.
- ²⁴ Javier C. Hernandez, "In Banning Ivory Trade, China Saw Benefits for Itself, Too," New York Times, January 2, 2017. https://www.nytimes.com/2017/01/02/world/asia/china-ivory-ban-elephants.html.
- ²⁵ Gwynn Guilford, "How China's Fish Bladder Investment Craze Is Wiping out Species on the Other Side of the Planet," *Quartz*, August 24, 2015. https://qz.com/468358/how-chinas-fish-bladder-investment-craze-is-wiping-out-species-on-the-other-side-of-the-planet/.
- ²⁶ Yufang Gao and Susan Clark, "Elephant Ivory Trade in China: Trends and Drivers," *Biological Conservation* 180 (2014): 27. https://conservationaction.co.za/wp-content/uploads/2014/10/Elephant-ivory-trade-in-China.pdf.
- ²⁷ Grace G. Gabriel, Ning Hua, Juan Wang, "Making a Killing: A 2011 Survey of Ivory Markets in China," *International Fund for Animal Welfare*, 2012, 3. https://www.ifaw.org/united-states/resource-centre/making-killing.
- ²⁸ Yufang Gao and Susan Clark, "Elephant Ivory Trade in China: Trends and Drivers," *Biological Conservation* 180 (2014): 27. https://conservationaction.co.za/wp-content/uploads/2014/10/Elephant-ivory-trade-in-China.pdf.
- ²⁹ Economist, "Prescription for Extinction," April 14, 2016. https://www.economist.com/news/international/21696967-misuse-traditional-asian-medicine-fuels-demand-endangered-beasts-prescription.
- 30 Shi Yi, "Wildlife Protection Draft Law Irks Chinese Medicine Industry," Sixth Tone, June 29, 2016. http://www.sixthtone.com/news/1016/wildlife-protection-draft-law-irks-chinese-medicine-industry.
- 31 Andrea Crosta, Kimberly Sutherland, and Chiara Talerico, "Grinding Rhino: Operation Red Cloud Investigative Report, an Undercover Investigation on Rhino Horn Trafficking in China and Vietnam," Elephant Action League, July 2017, 16. https://elephantleague.org/wp-content/uploads/2017/07/Grinding-Rhino-July2017-Elephant-Action-League.pdf; Environmental Investigation Agency, "New Wildlife Protection Law Is Passed Discussion of Use of Tiger Bone in Medicine." (Translation of Q. Zhou, "新《野生动物保护法》通过虎骨入药问题或讨论," Caixin, July 3, 2016. http://m.china.caixin.com/m/2016-07-03/100961514.html.) https://eia-international.org/wp-content/uploads/New-Wildlife-Protection-Law-is-passed-%E2%80%93-discussion-of-use-of-tiger-bone-in-medicine.pdf; Simon Denyer, "As Attitudes Change, Chinese Lawmakers Seek Better Protection for Rhinos and Other Endangered Animals," Washington Post, March 14, 2017. https://www.washingtonpost.com/news/worldviews/wp/2017/03/14/as-attitudes-change-chinese-lawmakers-seek-protection-for-rhinos-and-other-endangered-animals/?utm_term=.92f13716c281.
- ³² Grace G. Gabriel, "What the Future Holds This World Elephant Day," *International Fund for Animal Welfare*, August 11, 2017. https://www.ifaw.org/united-states/news/what-future-holds-world-elephant-day.
- ³³ International Fund for Animal Welfare, "Impact Evaluation on Ivory Trade in China IFAW PSA: 'Mom, I Have Teeth,'" in *Rapid Asia Flash Report*, May 2013, 6. https://www.ifaw.org/united-states/resource-centre/impact-evaluation-ivory-trade-china.
- ³⁴ Olivia Boyd, "Animal Welfare Debate Is Cultural Flashpoint in China," *China Dialogue*, October 4, 2013. https://www.chinadialogue.net/culture/5879-Animal-welfare-debate-is-cultural-flashpoint-in-China/en.
- 35 Shi Yi, "Wildlife Protection Draft Law Irks Chinese Medicine Industry," Sixth Tone, June 29, 2016. http://www.sixthtone.com/news/1016/wildlife-protection-draft-law-irks-chinese-medicine-industry; Li Jing, "Making a Killing from Killing: Chinese Activists Fear Revision of Wildlife Protection Law Will Only Increase Abuse of Animals," South China Morning Post, February 6, 2016. https://www.scmp.com/news/china/policies-politics/article/1910061/making-killing-chinese-activists-fear-revision; Ping Mang, "Wildlife Protection Law Revision: Wildlife Should Not Be Viewed as a Resource," Paper, January 7, 2016. Translation. https://www.thepaper.cn/newsDetail_forward_1417722.

- ³⁶ Sade Moneron, Nicola Okes, and Julian Rademeyer, "Pendants, Power, and Pathways: A Rapid Assessment of Smuggling Routes and Techniques Used in the Illicit Trade in African Rhino Horn," TRAFFIC Report, September 2017, 5–6. http://www.trafficj.org/publication/17_Pendants_Powder_and_Pathways_RhinoHorn.PDF.
- ³⁷ Mary Utermohlen and Patrick Baine, "Flying under the Radar: Wildlife Trafficking in the Air Transport Sector," *Center for Advanced Defense Studies and USAID Reducing Opportunities for Unlawful Transport of Endangered Species (ROUTES) Partnership*, 2017. http://www.traffic.org/publications/flying-under-the-radar-wildlife-trafficking-in-the-air-trans.html.
- ³⁸ Elephant Action League, "Grinding Rhino: Operation Red Cloud Investigative Report: An Undercover Investigation on Rhino Horn Trafficking in China and Vietnam," July 2017, 63. https://elephantleague.org/wp-content/uploads/2017/07/Grinding-Rhino-July2017-Elephant-Action-League.pdf.
- ³⁹ Elephant Action League, "Grinding Rhino: Operation Red Cloud Investigative Report: An Undercover Investigation on Rhino Horn Trafficking in China and Vietnam," July 2017, 63. https://elephantleague.org/wp-content/uploads/2017/07/Grinding-Rhino-July2017-Elephant-Action-League.pdf.
- ⁴⁰ Elephant Action League, "Grinding Rhino: Operation Red Cloud Investigative Report: An Undercover Investigation on Rhino Horn Trafficking in China and Vietnam," July 2017, 64. https://elephantleague.org/wp-content/uploads/2017/07/Grinding-Rhino-July2017-Elephant-Action-League.pdf.
- ⁴¹ Elephant Action League, "Grinding Rhino: Operation Red Cloud Investigative Report: An Undercover Investigation on Rhino Horn Trafficking in China and Vietnam," July 2017, 64. https://elephantleague.org/wp-content/uploads/2017/07/Grinding-Rhino-July2017-Elephant-Action-League.pdf.
- ⁴² Elephant Action League, "Grinding Rhino: Operation Red Cloud Investigative Report: An Undercover Investigation on Rhino Horn Trafficking in China and Vietnam," July 2017, 80–81. https://elephantleague.org/wp-content/uploads/2017/07/Grinding-Rhino-July2017-Elephant-Action-League.pdf.
- ⁴³ Elephant Action League, "Grinding Rhino: Operation Red Cloud Investigative Report: An Undercover Investigation on Rhino Horn Trafficking in China and Vietnam," July 2017, 80–81. https://elephantleague.org/wp-content/uploads/2017/07/Grinding-Rhino-July2017-Elephant-Action-League.pdf.
- ⁴⁴ Elephant Action League, "Grinding Rhino: Operation Red Cloud Investigative Report: An Undercover Investigation on Rhino Horn Trafficking in China and Vietnam," July 2017, 6. https://elephantleague.org/wp-content/uploads/2017/07/Grinding-Rhino-July2017-Elephant-Action-League.pdf.
- ⁴⁵ Elephant Action League, "Grinding Rhino: Operation Red Cloud Investigative Report: An Undercover Investigation on Rhino Horn Trafficking in China and Vietnam," July 2017, 67. https://elephantleague.org/wp-content/uploads/2017/07/Grinding-Rhino-July2017-Elephant-Action-League.pdf.
- ⁴⁶ Elephant Action League, "Grinding Rhino: Operation Red Cloud Investigative Report: An Undercover Investigation on Rhino Horn Trafficking in China and Vietnam," July 2017, 67. https://elephantleague.org/wp-content/uploads/2017/07/Grinding-Rhino-July2017-Elephant-Action-League.pdf.
- ⁴⁷ Elephant Action League, "Grinding Rhino: Operation Red Cloud Investigative Report: An Undercover Investigation on Rhino Horn Trafficking in China and Vietnam," July 2017, 67. https://elephantleague.org/wp-content/uploads/2017/07/Grinding-Rhino-July2017-Elephant-Action-League.pdf.
- ⁴⁸ Ziming Wan, "Control of Internet Wildlife Trade in China," *CITES World: Official Newsletter of the Parties*, Issue 19. https://www.cites.org/eng/news/world/19/3.php.
- ⁴⁹ GlobeScan, "Demand under the Ban China Ivory Consumption Research," commissioned by TRAFFIC and the World Wildlife Fund, December 2017, 46. http://www.wwfchina.org/content/press/publication/2017/Ivory.pdf.
- Yu Xiao, Jing Guan, and Ling Xu, "Wildlife Cybercrime in China," TRAFFIC Briefing, May 2017. http://www.traffic.org/publications/wildlife-cybercrime-in-china-e-commerce-and-social-media-mon.html.
- 51 China State Council, State Council Notification Concerning the Strict Control of Rhinoceros and Tigers and Operations Utilizing Their Products, October 29, 2018. Translation. http://www.gov.cn/zhengce/content/2018-10/29/content_5335423.htm; China's State Forestry Administration, China in Action: Protecting Wildlife and Combating Illegal Trade, June 2014, 5. http://english.forestry.gov.cn/uploads/Information_Services/Latest_Publication/China_in_Action.pdf.
- ⁵² Wildlife Protection Law of the People's Republic of China, 2016. Translation. http://www.xinhuanet.com/legal/2016-07/03/c 129110499.htm.
- ⁵³ China's State Forestry Administration, China in Action: Protecting Wildlife and Combating Illegal Trade, June 2014, 5, 8, 9. http://english.forestry.gov.cn/uploads/Information_Services/Latest_Publication/China_in_Action.pdf; Peter J. Li, "Enforcing Wildlife Protection in China: The Legislative and Political Solutions," China Information 21:1 (2007): 77, 92; Jiwen Chang, "China's Legal Response to Trafficking in Wild Animals: The Relationship between International Treaties and Chinese Law," American Journal of International Law Unbound 111 (2017): 408; CITES, "Operation COBRA II Press Release 10th February 2014," February 10, 2014. https://cites.org/sites/default/files/eng/news/sundry/2014/operation_cobra_ii_pr.pdf; CITES, "Joint Press Release: Successful Operation Highlights Growing International Cooperation to Combat Wildlife Crime," June 18, 2015.
- https://www.cites.org/eng/news/pr/iccwc_press_release_cobra_III; Environmental Investigation Agency, "China's Revised Wildlife Protection Law: Concerns and Opportunities," March 3, 2017. https://eia-international.org/wp-content/uploads/Chinas-revised-Wildlife-Protection-Law-EIA-concerns-and-opportunities.pdf; GlobeScan, "Demand under the Ban China Ivory Consumption Research," prepared for TRAFFIC and the World Wildlife Fund, December 2017, 5.
- $https://c402277.ssl.cfl.rackcdn.com/publications/1133/files/original/Demand_under_the_Ban_-these and the property of the pro$

- _China_Ivory_Consumption_Research_2017_FINAL_%282%29.pdf?1513025201; China State Council, State Council Notification Concerning the Strict Control of Rhinoceros and Tigers and Operations Utilizing Their Products, October 29, 2018. Translation. http://www.gov.cn/zhengce/content/2018-10/29/content_5335423.htm.
- ⁵⁴ People's Republic of China Wildlife Protection Law, 1988. Translation. http://www.npc.gov.cn/wxzl/gongbao/2000-12/10/content_5004512.htm; Environmental Investigation Agency, "China's Wildlife Protection Law." https://eia-international.org/our-work/wildlife/tigers/tiger-farming/chinas-wildlife-protection-law/.
- ⁵⁵ Environmental Investigation Agency, "China's Wildlife Protection Law: Tigers Are Still Not Safe." https://eia-international.org/wp-content/uploads/Chinas-Wildlife-Protection-Law-tigers-are-still-not-safe.pdf.
- ⁵⁶ China's State Forestry Administration, *China in Action: Protecting Wildlife and Combating Illegal Trade*, June 2014, 5–6. http://english.forestry.gov.cn/uploads/Information_Services/Latest_Publication/China_in_Action.pdf.
- ⁵⁷ Beth Walker, "China's Efforts to Wipe out the Trade in Endangered Species," *Europe China Research and Advice Network*, August 2014.
 - $http://eeas.europa.eu/archives/docs/china/docs/division_ecran/ecran_is_119_paper_95_chinas_efforts_to_wipe_out_the_trade_in_endangered_species_beth_walker_en.pdf.$
- ⁵⁸ Jiwen Chang, "China's Legal Response to Trafficking in Wild Animals: The Relationship between International Treaties and Chinese Law," American Journal of International Law Unbound 111 (2017): 408–412.
- ⁵⁹ Jiwen Chang, "China's Legal Response to Trafficking in Wild Animals: The Relationship between International Treaties and Chinese Law," *American Journal of International Law Unbound* 111 (2017): 408–412.
- ⁶⁰ Explanation by the Standing Committee of the National People's Congress of Articles 341 and 312 of the Criminal Law of the People's Republic of China, April 25, 2014. http://www.lnzslawyer.com/Article_show.asp?id=406; China's State Forestry Administration, China in Action: Protecting Wildlife and Combating Illegal Trade, June 2014, 8–9.
- ⁶¹ Zhao-min Zhou et al., "Scaling up Pangolin Protection in China," Frontiers in Ecology and the Environment 12:2 (March 2014), 97–98; Kristin Nowell and Xu Ling, "Taming the Tiger Trade: China's Markets for Wild and Captive Tiger Products since the 1993 Domestic Trade Ban," TRAFFIC East Asia, 2007, v-vi, 39–40, 48.
- ⁶² U.S. Law Library of Congress, China: New Wildlife Protection Law, August 5, 2016. http://www.loc.gov/law/foreign-news/article/china-new-wildlife-protection-law/; People's Republic of China Wildlife Protection Law, 1988. Translation. http://www.npc.gov.cn/wxzl/gongbao/2000-12/10/content 5004512.htm.
- ⁶³ Wildlife Protection Law of the People's Republic of China, 2016. Translation. http://www.xinhuanet.com/legal/2016-07/03/c_129110499.htm; U.S. Law Library of Congress, China: New Wildlife Protection Law, August 5, 2016. http://www.loc.gov/law/foreign-news/article/china-new-wildlife-protection-law/.
- 64 China's State Forestry Administration, China in Action: Protecting Wildlife and Combating Illegal Trade, June 2014, 20–22. http://english.forestry.gov.cn/uploads/Information_Services/Latest_Publication/China_in_Action.pdf; Beth Walker, "China's Efforts to Wipe out the Trade in Endangered Species," Europe China Research and Advice Network, August 2014. http://eeas.europa.eu/archives/docs/china/docs/division_ecran/ecran_is_119_paper_95_chinas_efforts_to_wipe_out_the_trade_in_endangered_species_beth_walker_en.pdf.
- ⁶⁵ China's State Forestry Administration, *China in Action: Protecting Wildlife and Combating Illegal Trade*, June 2014, 20–21. http://english.forestry.gov.cn/uploads/Information_Services/Latest_Publication/China_in_Action.pdf.
- 66 Wan Ziming, "Wildlife Enforcement in China," Commission on Crime Prevention and Criminal Justice, April 2013. https://www.unodc.org/documents/commissions/CCPCJ/CCPCJ_Sessions/CCPCJ_22/Thematic_Discussions/Presentation_Panellists/As ia-Pacific-Group_China_Ziming_Presentation.pdf.
- ⁶⁷ Rachel Bale, "China Shuts down its Legal Ivory Trade," *National Geographic*, December 30, 2017. https://news.nationalgeographic.com/2017/12/wildlife-watch-china-ivory-ban-goes-into-effect/.
- ⁶⁸ Environmental Investigation Agency, interview with Commission staff, April 25, 2018.
- ⁶⁹ China's State Forestry Administration, *China in Action: Protecting Wildlife and Combating Illegal Trade*, June 2014, 22. http://english.forestry.gov.cn/uploads/Information_Services/Latest_Publication/China_in_Action.pdf.
- ⁷⁰ Jennifer Duggan, "Sales of Shark Fin in China Drop by up to 70%," *Guardian*, August 7, 2014. https://www.theguardian.com/environment/chinas-choice/2014/aug/08/sales-of-shark-fin-china-drop-70.
- ⁷¹ WildAid, "Evidence of Declines in Shark Fin Demand in China," September 2017, 4, 5. http://wildaid.org/wp-content/uploads/2017/09/SharkReport_Evidence-of-Declines-in-Shark-Fin-Demand_China.pdf.
- ⁷² WildAid, "Shark Fin Demand in China Down, Report Finds," October 24, 2014. https://wildaid.org/shark-fin-demand-in-china-down-report-finds/.
- ⁷³ WildAid, "Evidence of Declines in Shark Fin Demand in China," September 2017, 2. http://wildaid.org/wp-content/uploads/2017/09/SharkReport_Evidence-of-Declines-in-Shark-Fin-Demand_China.pdf.
- 74 WildAid, "Evidence of Declines in Shark Fin Demand in China," September 2017, 2. http://wildaid.org/wp-content/uploads/2017/09/SharkReport_Evidence-of-Declines-in-Shark-Fin-Demand_China.pdf.
- ⁷⁵ Christina Vallianos et al., "Sharks in Crisis: Evidence of Positive Behavioral Change in China as New Threats Emerge," *WildAid*, February 2018, 4, 7. *https://wildaid.org/wp-content/uploads/2018/02/WildAid-Sharks-in-Crisis-2018.pdf*.
- ⁷⁶ Christina Vallianos et al., "Sharks in Crisis: Evidence of Positive Behavioral Change in China as New Threats Emerge," *WildAid*, February 2018, 7. https://wildaid.org/wp-content/uploads/2018/02/WildAid-Sharks-in-Crisis-2018.pdf.

⁷⁷ TRAFFIC personnel email with Commission staff, April 11, 2018.

- ⁷⁸ ChinaFile, "Fact Sheet on China's Foreign NGO Law," November 1, 2017. http://www.chinafile.com/ngo/latest/fact-sheet-chinas-foreign-ngo-law.
- ⁷⁹ Kristin Shi-Kupfer and Bertram Lang, "Overseas NGOs in China: Left in Legal Limbo," *Diplomat*, March 4, 2017. https://thediplomat.com/2017/03/overseas-ngos-in-china-left-in-legal-limbo/.
- 80 DD Wu, "More than 7,000 Foreign NGOs in China: Only 91 Registered So Far," *Diplomat*, June 2, 2017. https://thediplomat.com/2017/06/more-than-7000-foreign-ngos-in-china-only-72-registered-so-far/.
- 81 Officials at the U.S. Department of State, interview with Commission staff, May 19, 2018.
- 82 Nectar Gan, "Why Foreign NGOs Are Struggling with the New Chinese Law," South China Morning Post, June 14, 2017.
- ⁸³ White House, Fact Sheet: President Xi Jinping's State Visit to the United States, September 25, 2015. https://obamawhitehouse.archives.gov/the-press-office/2015/09/25/fact-sheet-president-xi-jinpings-state-visit-united-states.
- 84 China's State Forestry Administration, China in Action: Protecting Wildlife and Combating Illegal Trade, June 2014, 34–35. http://english.forestry.gov.cn/uploads/Information_Services/Latest_Publication/China_in_Action.pdf; China Ministry of Foreign Affairs, "China-U.S. Strategic and Economic Dialogue Outcomes of the Strategic Track," July 11, 2014. https://www.fmprc.gov.cn/mfa_eng/wjdt_665385/2649_665393/t1173628.shtml.
- 85 U.S. Government Accountability Office, Combating Wildlife Trafficking: Agencies Are Taking Action to Reduce Demand but Could Improve Collaboration in Southeast Asia, October 2017, 23. https://www.gao.gov/assets/690/687709.pdf; U.S. Fish and Wildlife Service and China's State Forestry Administration, U.S.-China Cooperative Efforts for the Conservation of Wildlife and Wildlife Habitat: Activities for 2014-2016. https://www.fws.gov/international/pdf/activities-report-china-2014-2016.pdf; U.S. Fish and Wildlife Service and China's State Forestry Administration, U.S.-China Cooperative Efforts for the Conservation of Wildlife and Wildlife Habitat: Activities for 2011-2013. https://www.fws.gov/international/pdf/activities-report-china-2011-2013.pdf.
- ⁸⁶ Officials at the U.S. Department of the Interior, interview with Commission staff, May 14, 2018.
- ⁸⁷ Officials at the U.S. Department of the Interior, interview with Commission staff, May 14, 2018.
- ⁸⁸ World Wildlife Fund, "In a First, US, China and Mexico Meet to Halt Illegal Totoaba Trade and Save the Vaquita," August 25, 2017. http://wwf.panda.org/?309450/In-a-first-US-China-and-Mexico-meet-to-halt-illegal-totoaba-trade-and-save-the-vaquita.
- ⁸⁹ Xinhua, "China Hands over Anti-Poaching Facilities to Zimbabwe." http://www.xinhuanet.com/english/2015-12/10/c_134904709.htm; China's State Forestry Administration, China in Action: Protecting Wildlife and Combating Illegal Trade, June 2014, 35. http://english.forestry.gov.cn/uploads/Information_Services/Latest_Publication/China_in_Action.pdf; Japan's Ministry of the Environment, "[International Cooperation] Wildlife Conservation in Japan." https://www.env.go.jp/en/nature/biodiv/intel.html.
- ⁹⁰ Xinhua, "China Hands over Anti-Poaching Facilities to Zimbabwe." http://www.xinhuanet.com/english/2015-12/10/c_134904709.htm.
- 91 China's State Forestry Administration, China in Action: Protecting Wildlife and Combating Illegal Trade, June 2014, 35, 37. http://english.forestry.gov.cn/uploads/Information_Services/Latest_Publication/China_in_Action.pdf.
- ⁹² China's State Forestry Administration, *China in Action: Protecting Wildlife and Combating Illegal Trade*, June 2014, 31–33. http://english.forestry.gov.cn/uploads/Information_Services/Latest_Publication/China_in_Action.pdf.
- 93 International Conference for Snow Leopard Conservation, "SZ Consensus on Global Snow Leopard Conservation," September 6, 2018.
 http://szdaily.sznews.com/PC/layout/201809/06/node_02.html#content_458520; Global Snow Leopard Conservation Forum, "The Bishkek Declaration 2017: Caring for Snow Leopards and Mountains—Our Ecological Future," August 24–25, 2017.
 http://www.globalsnowleopard.org/wp-content/uploads/2017/08/Declaration_EN.pdf; World Bank, "The Global Tiger Initiative," June 30, 2016. http://www.worldbank.org/en/topic/environment/brief/the-global-tiger-initiative; Third Asian Ministerial Conference on Tiger Conservation, "New Delhi Resolution on Tiger Conservation," April 14, 2016.
 http://nebula.wsimg.com/0c379dfd00d8f876557d134eb97bf9c9?AccessKeyId=F6E556E4EED96E99493D&disposition=0&alloworigin = 1; Global Snow Leopard Conservation Forum, "The Bishkek Declaration on the Conservation of the Snow Leopard," October 22–23, 2013. http://www.snowleopardnetwork.org/sln/docs/Bishkekdeclarationfulltext.pdf; Second Stocktaking Conference to Review
 - Implementation of the Global Tiger Recovery Program (GTRP), "Dhaka Recommendations on Advancing Implementation of the Global Tiger Recovery Program," September 16, 2014. http://21tiger.zslsites.org/assets/21tiger/Resources/Dhaka-Recommendations14.pdf; Second Asian Ministerial Conference on Tiger Conservation, "The Thimphu Affirmative Nine-Point Action Agenda on Tiger Conservation," October 23, 2012. http://21tiger.zslsites.org/assets/21tiger/docs/Thimphu_Action_Agenda_Approved_23Oct2012.pdf.
- ⁹⁴ U.S. Fish and Wildlife Service, Service, Partner Nations to Wildlife Traffickers: There's Nowhere to Hide, March 9, 2017. https://www.fws.gov/news/blog/index.cfm/2017/3/9/Service-Partner-Nations-to-Wildlife-Traffickers-Theres-Nowhere-to-Hide; Convention on International Trade in Endangered Species of Wild Fauna and Flora, "Successful Operation Highlights Growing International Cooperation to Combat Wildlife Crime," June 18, 2015.
- https://www.cites.org/eng/news/pr/iccwc_press_release_cobra_III; INTERPOL, "INTERPOL Operation against Wildlife Trafficking Marks World Environment Day," June 5, 2015. https://www.interpol.int/News-and-media/News/2015/N2015-076; Convention on International Trade in Endangered Species of Wild Fauna and Flora, "Operation Cobra II Press Release—10th February 2014," February 10, 2014. https://cites.org/sites/default/files/eng/news/sundry/2014/operation_cobra_ii_pr.pdf; Convention on International Trade in Endangered Species of Wild Fauna and Flora, "CITES Secretary-General Praises Operation Cobra," February 18, 2013. https://www.cites.org/eng/news/pr/2013/20130218_operation-cobra.php.
- 95 INTERPOL, "Wildlife Crime: Global Seizures and Arrests in Transcontinental Operation," June 20, 2018. https://www.interpol.int/News-and-media/News/2018/N2018-058.

- 96 Convention on International Trade in Endangered Species of Wild Fauna and Flora, "Successful Operation Highlights Growing International Cooperation to Combat Wildlife Crime," June 18, 2015.
 - https://www.cites.org/eng/news/pr/iccwc_press_release_cobra_III; Convention on International Trade in Endangered Species of Wild Fauna and Flora, "Operation Cobra II Press Release—10th February 2014," February 10, 2014.
 - https://cites.org/sites/default/files/eng/news/sundry/2014/operation_cobra_ii_pr.pdf; Convention on International Trade in Endangered Species of Wild Fauna and Flora, "CITES Secretary-General Praises Operation Cobra," February 18, 2013.
- https://www.cites.org/eng/news/pr/2013/20130218_operation-cobra.php; Shannon Van Sant, "Operation Succeeds at Cracking down on Illegal Wildlife Trade," Voice of America, February 18, 2013. https://www.voanews.com/a/operation-succeeds-at-cracking-down-on-illegal-wildlife-trade/1605698.html.
- ⁹⁷ Convention on International Trade in Endangered Species of Wild Fauna and Flora, "Operation Cobra II Press Release—10th February 2014," February 10, 2014. https://cites.org/sites/default/files/eng/news/sundry/2014/operation_cobra_ii_pr.pdf; Convention on International Trade in Endangered Species of Wild Fauna and Flora, "CITES Secretary-General Praises Operation Cobra," February 18, 2013. https://www.cites.org/eng/news/pr/2013/20130218_operation-cobra.php; Shannon Van Sant, "Operation Succeeds at Cracking down on Illegal Wildlife Trade," Voice of America, February 18, 2013. https://www.voanews.com/a/operation-succeeds-at-cracking-down-on-illegal-wildlife-trade/1605698.html.
- ⁹⁸ Convention on International Trade in Endangered Species of Wild Fauna and Flora, "Operation Cobra II Press Release—10th February 2014," February 10, 2014. https://cites.org/sites/default/files/eng/news/sundry/2014/operation_cobra_ii_pr.pdf.
- ⁹⁹ Europol, "Operation Cobra III." https://www.europol.europa.eu/activities-services/europol-in-action/operations/operation-cobra-iii; Convention on International Trade in Endangered Species of Wild Fauna and Flora, "Successful Operation Highlights Growing International Cooperation to Combat Wildlife Crime," June 18, 2015.
 https://www.cites.org/eng/news/pr/iccwc_press_release_cobra_III; Guardian, "300 Arrested in Global Wildlife Raids," June 18, 2015.
 https://www.theguardian.com/environment/2015/jun/18/300-arrested-in-global-wildlife-raids.
- 100 Environmental Investigation Agency, "Major Big Cat Skins Seizure a Chance to Disrupt Traffickers," November 4, 2016. https://eia-international.org/major-big-cat-skins-seizure-chance-disrupt-traffickers.
- Environmental Investigation Agency, "China's Wildlife Protection Law: Tigers Are Still Not Safe." https://eia-international.org/wp-content/uploads/Chinas-Wildlife-Protection-Law-tigers-are-still-not-safe.pdf, Rachael Bale, "Five Ways China's Wildlife Protection Law Will Harm Wildlife," National Geographic, February 1, 2016. https://news.nationalgeographic.com/2016/02/160201-China-wildlife-protection-law-conservation/.
- ¹⁰² Wildlife Protection Law of the People's Republic of China, Article 27, 2016. Translation. http://www.xinhuanet.com/legal/2016-07/03/c_129110499.htm.
- ¹⁰³ Environmental Investigation Agency, "Chinese Government Permitting Commercial Trade in the Bones of Threatened Leopards," May 25, 2018. https://eia-international.org/chinese-government-permitting-commercial-trade-bones-threatened-leopards; Grace Ge Gabriel, "China's Amended Wildlife Law Lacks Teeth," International Fund for Animal Welfare, July 7, 2016. https://www.ifaw.org/united-states/news/chinas-amended-wildlife-law-lacks-teeth.
- ¹⁰⁴ China State Council, State Council Notification Concerning the Strict Control of Rhinoceros and Tigers and Operations Utilizing Their Products, October 29, 2018. http://www.gov.cn/zhengce/content/2018-10/29/content_5335423.htm. Translation.
- Wang Ru and Shan Juan, "Call to Close Tiger Farms Disputed," China Daily, March 13, 2010. http://www.chinadaily.com.cn/china/2010-03/13/content_9584123.htm.
- Mongabay, "China Restores Ban on Rhino and Tiger Parts, For Now," November 13, 2018. https://news.mongabay.com/2018/11/china-restores-ban-on-rhino-and-tiger-parts-for-now/.
- 107 World Wildlife Fund, "WWF Statement on China's Legalization of Domestic Trade in Tiger Bone and Rhino Horn," October 29, 2018. http://wwf.panda.org/wwf_news/press_releases/?337353/WWF-statement-on-Chinas-legalization-of-domestic-trade-in-tiger-bone-and-rhino-horn.
- Environmental Investigation Agency, "China's Wildlife Protection Law: Tigers Are Still Not Safe." https://eia-international.org/wp-content/uploads/Chinas-Wildlife-Protection-Law-tigers-are-still-not-safe.pdf; Wildlife Protection Law of the People's Republic of China, 2016. http://www.xinhuanet.com/legal/2016-07/03/c_129110499.htm; Simon Denyer, "Grim News for Bears, Tigers under Proposed New Wildlife Law in China," Washington Post, January 30, 2016. https://www.washingtonpost.com/world/asia_pacific/grim-news-for-tigers-bears-as-china-wildlife-law-allows-farming-medical-use/2016/01/29/e991dde0-c5d7-11e5-b933-31c93021392a_story.html?utm_term=.6a2eaec7f18c.
- 109 Simon Denyer, "Tiger Farms Stoke Chinese Demand for Tiger Wine and Rugs, Putting Wild Cats in Peril," Washington Post, January 1, 2015. https://www.washingtonpost.com/world/asia_pacific/tiger-farms-stoke-chinese-demand-for-tiger-wine-and-rugs-putting-wild-cats-in-peril/2015/01/01/6f292ea0-796b-11e4-9721-80b3d95a28a9_story.html?utm_term=.9480810c8163; Environmental Investigation Agency, "China's Wildlife Protection Law." https://eia-international.org/our-work/environmental-crime-and-governance/illegal-wildlife-trade/tigers-other-asian-big-cats/chinas-draft-wildlife-protection-law.
- ¹¹⁰ Jason Bittel, "Poachers Abuse an International-Law Loophole to Sell Some of the Rarest Animals on Earth," *NDRC*, March 28, 2016. https://www.nrdc.org/onearth/poachers-international-loophole-captive-breeding.
- 111 Environmental Investigation Agency, "China's Wildlife Protection Law: Tigers Are Still Not Safe." https://eia-international.org/wp-content/uploads/Chinas-Wildlife-Protection-Law-tigers-are-still-not-safe.pdf.
- ¹¹² Environmental Investigation Agency, "China's Revised Wildlife Protection Law: Concerns and Opportunities," March 3, 2017. https://eia-international.org/wp-content/uploads/Chinas-revised-Wildlife-Protection-Law-EIA-concerns-and-opportunities.pdf.

- ¹¹³ Peter J. Li, Associate Professor, University of Houston-Downtown, interview with Commission staff, April 2, 2018.
- 114 Jiwen Chang, "China's Legal Response to Trafficking in Wild Animals: The Relationship between International Treaties and Chinese Law," American Journal of International Law Unbound 111 (2017): 408–412.
- ¹¹⁵ Peter J. Li, Associate Professor, University of Houston-Downtown, interview with Commission staff, April 2, 2018.
- ¹¹⁶ Benjamin Haas, "Under Pressure: The Story behind China's Ivory Ban," *Guardian*, August 29, 2017. https://www.theguardian.com/environment/2017/aug/29/story-behind-china-ivory-ban.
- ¹¹⁷ Jiwen Chang, "China's Legal Response to Trafficking in Wild Animals: The Relationship between International Treaties and Chinese Law," *American Journal of International Law Unbound* 111 (2017): 408–412.
- 118 Wan Ziming, "Wildlife Enforcement in China," Commission on Crime Prevention and Criminal Justice, April 2013. https://www.unodc.org/documents/commissions/CCPCJ/CCPCJ_Sessions/CCPCJ_22/Thematic_Discussions/Presentation_Panellists/As ia-Pacific-Group_China_Ziming_Presentation.pdf.
- Elephant Action League, "Grinding Rhino: Operation Red Cloud Investigative Report: An Undercover Investigation on Rhino Horn Trafficking in China and Vietnam," July 2017, 6. https://elephantleague.org/wp-content/uploads/2017/07/Grinding-Rhino-July2017-Elephant-Action-League.pdf.
- Elephant Action League, "Grinding Rhino: Operation Red Cloud Investigative Report: An Undercover Investigation on Rhino Horn Trafficking in China and Vietnam," July 2017, 6, 44, 63. https://elephantleague.org/wp-content/uploads/2017/07/Grinding-Rhino-July2017-Elephant-Action-League.pdf.
- ¹²¹ Elephant Action League, "Grinding Rhino: Operation Red Cloud Investigative Report: An Undercover Investigation on Rhino Horn Trafficking in China and Vietnam," July 2017, 38, 47, 64. https://elephantleague.org/wp-content/uploads/2017/07/Grinding-Rhino-July2017-Elephant-Action-League.pdf.
- ¹²² Environmental Investigation Agency, interview with Commission staff, April 25, 2018; Peter J. Li, Associate Professor, University of Houston-Downtown, interview with Commission staff, April 2, 2018.
- ¹²³ Environmental Investigation Agency, interview with Commission staff, April 25, 2018.
- 124 Wan Ziming, "Wildlife Enforcement in China," Commission on Crime Prevention and Criminal Justice, April 2013. https://www.unodc.org/documents/commissions/CCPCJ/CCPCJ_Sessions/CCPCJ_22/Thematic_Discussions/Presentation_Panellists/As ia-Pacific-Group China Ziming Presentation.pdf.
- ¹²⁵ Dan Levin, "From Elephants' Mouths, an Illicit Trail to China," *New York Times*, March 1, 2013. https://www.nytimes.com/2013/03/02/world/asia/an-illicit-trail-of-african-ivory-to-china.html?module=Promotron®ion=Body&action=click&pgtype=article.
- ¹²⁶ National Geographic, "Battle for the Elephants," February 2013. https://news.nationalgeographic.com/2017/03/wildlife-watch-china-elephant-ivory-trafficking-ban/.
- ¹²⁷ Environmental Investigation Agency, "Hidden in Plain Sight: China's Clandestine Tiger Trade," February 2013, 8. https://eia-international.org/wp-content/uploads/EIA-Hidden-in-Plain-Sight-med-res.pdf.
- ¹²⁸ Zhao-Min Zhou et al., "Private Possession Drives Illegal Wildlife Trade in China," *Frontiers in Ecology and the Environment* 13:7 (September 2015): 353.
- ¹²⁹ Jiwen Chang, "China's Legal Response to Trafficking in Wild Animals: The Relationship between International Treaties and Chinese Law," American Journal of International Law Unbound 111 (2017): 408–412; Beth Walker, "China's Efforts to Wipe out the Trade in Endangered Species," Europe China Research and Advice Network, August 2014; Grace G. Gabriel, Ning Hua, and Juan Wang, "Making a Killing: A 2011 Survey of Ivory Markets in China," International Fund for Animal Welfare, 2011, 16. https://s3.amazonaws.com/ifaw-pantheon/sites/default/files/legacy/Making%20a%20Killing.pdf.
- ¹³⁰ Grace G. Gabriel, Ning Hua, and Juan Wang, "Making a Killing: A 2011 Survey of Ivory Markets in China," *International Fund for Animal Welfare*, 2011, 16. https://s3.amazonaws.com/ifaw-pantheon/sites/default/files/legacy/Making%20a%20Killing.pdf.
- ¹³¹ Environmental Investigation Agency, interview with Commission staff, April 25, 2018; Environmental Investigation Agency, "Cultivating Demand: The Growing Threat of Tiger Farms," November 2017, 4, 13. https://eia-international.org/report/cultivating-demand-growing-threat-tiger-farms; Environmental Investigation Agency, "Hidden in Plain Sight: China's Clandestine Tiger Trade," February 2013, 13. https://eia-international.org/wp-content/uploads/EIA-Hidden-in-Plain-Sight-med-res.pdf.
- ¹³² Elephant Action League, "Grinding Rhino: Operation Red Cloud Investigative Report: An Undercover Investigation on Rhino Horn Trafficking in China and Vietnam," July 2017, 73. https://elephantleague.org/wp-content/uploads/2017/07/Grinding-Rhino-July2017-Elephant-Action-League.pdf.
- ¹³³ Environmental Investigation Agency, "Vanishing Point: Criminality, Corruption and the Devastation of Tanzania's Elephants," November 2014, 22. http://eia-international.org/wp-content/uploads/EIA-Vanishing-Point-lo-res1.pdf.
- 134 BBC, "Tanzania Ivory: China Officials 'Went on Buying Spree," November 6, 2014. http://www.bbc.com/news/world-asia-china-29929423.
- 135 Liu Qin, "China's Ivory Sales Ban Shows Need for Asia-Wide Strategy," Chinadialogue, April 24, 2018. https://www.chinadialogue.net/article/show/single/en/10603-China-s-ivory-sales-ban-shows-need-for-Asia-wide-strategy.
- ¹³⁶ Peter J. Li, Associate Professor, University of Houston-Downtown, interview with Commission staff, April 3, 2018.
- ¹³⁷ Grace G. Gabriel, Ning Hua, and Juan Wang, "Making a Killing: A 2011 Survey of Ivory Markets in China," *International Fund for Animal Welfare*, 2011, 17–18. https://s3.amazonaws.com/ifaw-pantheon/sites/default/files/legacy/Making%20a%20Killing.pdf.
- ¹³⁸ International Fund for Animal Welfare, "Ivory Market in China: China Ivory Trade Survey Report," June 2006, 7. http://www.wwfchina.org/content/press/publication/2017/Ivory.pdf.

- ¹³⁹ Grace Ge Gabriel, "Opinion: Elephants Are Not Widgets," *National Geographic*, September 24, 2014.
 - https://blog.nationalgeographic.org/2014/09/24/opinion-elephants-are-not-widgets/; Dan Levin, "From Elephants' Mouths, an Illicit Trail to China," New York Times, March 1, 2013. https://www.nytimes.com/2013/03/02/world/asia/an-illicit-trail-of-african-ivory-to-china.html; Andrew M. Lemieux and Ronald V. Clarke, "The International Ban on Ivory Sales and its Effects on Elephant Poaching in Africa," British Journal of Criminology 49 (2009): 459.
 - https://watermark.silverchair.com/azp030.pdf?token=AQECAHi208BE49Ooan9kkhW_Ercy7Dm3ZL_9Cf3qfKAc485ysgAAAjswggI3BgkqhkiG9w0BBwagggIoMIICJAIBADCCAh0GCSqGSIb3DQEHATAeBglghkgBZQMEAS4wEQQMj1ppFeesngT5IsU4AgEQgIIB7vF9ibfoDzNz40wVCgjXH66QSzFhhHUWDNyprWDwBC35-
 - sVuHAh7_0sQrdd_tFOlofAocP_SkE27JCQa8Glh4R67DZrz13IRCwz8rpxghAj5WEfDITHh1fDNjz-
 - FwQ7eIRsrrWIUcH7R5vlOnYMCuv0XICmhH3kagIUOcRzC_buPbT2lX_6HO5xbhUiHT1LxpyPfGn1zizvXg9IB-kSzv6aNSDxUnYVSHoRcJBcBoB6KebAOnTG9Kd3mAv8D-
 - YWLSQ6ylBG6NsNarT6PQ88HPzVFW8gboTtfwGNNDNhGiehTol7sHo7WNzsIsJNPIUOW5SUdOSEPhqkDPq-
 - OP97Jk8NKpL2CIYES9FkN-WRjabhmM9QREl6WeNKDwdADoz__deUYZ8JDZ-IMqG0kj9qdaUKtx3foNttw4b2h79XSZFwc6bTiwMcv-arFn1zx4ca3r9FF34gyPD5Cfk1PJBCMxBlaEb-S_Yi9_R3uoh58gy-
 - $BMO8XJVT3TIfS6ffNG0vHkW1TXIBtxXouQLszWDez0vChDajSCW_chl5qRpP7sIent-fDPhUEd4GFQl8Ya-like for the property of the property of$
 - 1sxE17PK0HUQsH_dSr4ntM6IK0QElZyiHpK31uqpRajwfLnZQrk68MEXuGhwCVL8f_QgriRruWhsbP6Z_iPlTU.
- ¹⁴⁰ Grace G. Gabriel, Ning Hua, and Juan Wang, "Making a Killing: A 2011 Survey of Ivory Markets in China," *International Fund for Animal Welfare*, 2011, 4–5. https://s3.amazonaws.com/ifaw-pantheon/sites/default/files/legacy/Making%20a%20Killing.pdf.
- ¹⁴¹ Solomon Hsiang and Nitin Sekar, "NBER Working Paper No. 22314: Does Legalization Reduce Black Market Activity? Evidence from a Global Ivory Experiment and Elephant Poaching Data," *National Bureau of Economic Research*, June 2016. http://www.nber.org/papers/w22314; Damian Carrington, "Legal Ivory Sale Drove Dramatic Increase in Elephant Poaching, Study Shows," *Guardian*, June 13, 2016. https://www.theguardian.com/environment/2016/jun/13/legal-ivory-sale-drove-dramatic-increase-in-elephant-poaching-study-shows.
- ¹⁴² Grace G. Gabriel, Ning Hua, and Juan Wang, "Making a Killing: A 2011 Survey of Ivory Markets in China," *International Fund for Animal Welfare*, 2011, 2, 17. https://s3.amazonaws.com/ifaw-pantheon/sites/default/files/legacy/Making%20a%20Killing.pdf.
- ¹⁴³ Elephant Action League, "Blending Ivory: China's Old Loopholes, New Hopes," December 2015, 10. http://elephantleague.org/wp-content/uploads/2015/12/EAL-BLENDING-IVORY-Report-Dec2015.pdf; Grace G. Gabriel, Ning Hua, and Juan Wang, "Making a Killing: A 2011 Survey of Ivory Markets in China," International Fund for Animal Welfare, 2011, 17. https://s3.amazonaws.com/ifaw-pantheon/sites/default/files/legacy/Making%20a%20Killing.pdf
- ¹⁴⁴ Grace G. Gabriel, Ning Hua, and Juan Wang, "Making a Killing: A 2011 Survey of Ivory Markets in China," *International Fund for Animal Welfare*, 2011, 17. https://s3.amazonaws.com/ifaw-pantheon/sites/default/files/legacy/Making%20a%20Killing.pdf.
- ¹⁴⁵ Grace G. Gabriel, Ning Hua, and Juan Wang, "Making a Killing: A 2011 Survey of Ivory Markets in China," *International Fund for Animal Welfare*, 2011, 17. https://s3.amazonaws.com/ifaw-pantheon/sites/default/files/legacy/Making%20a%20Killing.pdf; Elephant Action League, "Blending Ivory: China's Old Loopholes, New Hopes," December 2015, 10. https://elephantleague.org/wp-content/uploads/2015/12/EAL-BLENDING-IVORY-Report-Dec2015.pdf.
- ¹⁴⁶ Jonathan Kaiman, "China-Africa Relations Hurt by Bad Chinese Behavior, Says Ambassador," Guardian, July 17, 2014. https://www.theguardian.com/world/2014/jul/17/chinese-ambassador-tanzania-china-africa-relationship-ivory-smuggling-counterfeit; also see Javier Hernandez, "In Banning Ivory Trade, China Saw Benefits for Itself, Too," New York Times, January 2, 2017. https://www.nytimes.com/2017/01/02/world/asia/china-ivory-ban-elephants.html.
- ¹⁴⁷ Christian Nelleman et al., eds., "Elephants in the Dust: The African Elephant Crisis, A Rapid Response Assessment," UNEP, CITES, IUCN, and TRAFFIC joint report, 2013, 7.
- https://gridarendalwebsitelive.s3.amazonaws.com/production/documents/:s_document/60/original/GRIDPublication.pdf?1483646235.
- 148 GlobeScan, "Demand under the Ban China Ivory Consumption Research," commissioned by TRAFFIC and the World Wildlife Fund, December 2017, 6. http://www.wwfchina.org/content/press/publication/2017/Ivory.pdf.
- ¹⁴⁹ International Fund for Animal Welfare, "Impact Evaluation on Ivory Trade in China IFAW PSA: 'Mom, I Have Teeth,'" in *Rapid Asia Flash Report*, May 2013, 4. https://www.ifaw.org/united-states/resource-centre/impact-evaluation-ivory-trade-china.
- ¹⁵⁰ John Bredar, "The Ivory Trade: Thinking Like a Businessman to Stop the Business," *National Geographic*, February 26, 2013. https://blog.nationalgeographic.org/2013/02/26/the-ivory-trade-thinking-like-a-businessman-to-stop-the-business/.
- 151 U.S. Fish and Wildlife Service, Destruction of Confiscated Elephant Ivory in Times Square: Questions and Answers, June 2015. https://www.fws.gov/le/pdf/NY-Ivory-Crush-Q-and-A.pdf.
- ¹⁵² Adam Vaughan, "China Crushes Six Tons of Ivory," Guardian, January 6, 2014. https://www.theguardian.com/environment/2014/jan/06/china-crush-ivory-elephant-poaching.
- 153 Grace Ge Gabriel, "China Closes Ivory Trade," International Fund for Animal Welfare, January 3, 2018. https://www.ifaw.org/canada/news/china-closes-ivory-trade.
- ¹⁵⁴ Officials from the U.S. Department of State, interview with Commission staff, April 18, 2018.
- ¹⁵⁵ Grace Ge Gabriel, "China Closes Ivory Trade," International Fund for Animal Welfare, January 3, 2018. https://www.ifaw.org/united-states/news/china-closes-ivory-trade.
- ¹⁵⁶ NPR, "How China's Ivory Ban Could Affect Elephant Poaching in Africa," January 4, 2018.
 https://www.npr.org/2018/01/04/575774144/how-chinas-ivory-ban-could-affect-elephant-poaching-in-africa; Grace Ge Gabriel, "China Closes Ivory Trade," International Fund for Animal Welfare, January 3, 2018.

- http://www.wwfchina.org/content/press/publication/2017/Ivory.pdf; Naomi Larsson, "China's Ivory Ban Sparks Dramatic Drop in Prices across Asia," Guardian, June 2, 2017. https://www.theguardian.com/environment/2017/jun/02/chinas-ivory-ban-sparks-dramatic-drop-in-prices-across-asia.
- 157 GlobeScan, "Demand under the Ban China Ivory Consumption Research," commissioned by TRAFFIC and the World Wildlife Fund, December 2017, 14. http://www.wwfchina.org/content/press/publication/2017/Ivory.pdf.
- ¹⁵⁸ GlobeScan, "Demand under the Ban China Ivory Consumption Research," commissioned by TRAFFIC and the World Wildlife Fund, December 2017, 14. http://www.wwfchina.org/content/press/publication/2017/Ivory.pdf.
- 159 GlobeScan, "Demand under the Ban China Ivory Consumption Research," commissioned by TRAFFIC and the World Wildlife Fund, December 2017, 15. http://www.wwfchina.org/content/press/publication/2017/Ivory.pdf.
- 160 Officials from the U.S. Department of State, interview with Commission staff, April 19, 2018; also see Liu Qin, "China's Ivory Sales Ban Shows Need for Asia-Wide Strategy," Chinadialogue, April 24, 2018. https://www.chinadialogue.net/article/show/single/en/10603-China-s-ivory-sales-ban-shows-need-for-Asia-wide-strategy.
- 161 Environmental Investigation Agency, "The Shuidong Connection: Exposing the Global Hub of the Illegal Ivory Trade," July 2017, 17. https://eia-international.org/wp-content/uploads/EIA-The-Shuidong-Connection-FINAL-1.pdf.
- ¹⁶² Rachael Bale, "With Ivory Ban Imminent, What Will Happen to China's Legal Stockpile?" *National Geographic*, November 12, 2015. https://news.nationalgeographic.com/2015/11/151112-ivory-china-elephants-poaching-wildlife-trafficking-conservation/.
- ¹⁶³ China State Council, State Council Notification Concerning the Strict Control of Rhinoceros and Tigers and Operations Utilizing Their Products, October 29, 2018. Translation. http://www.gov.cn/zhengce/content/2018-10/29/content_5335423.htm.
- ¹⁶⁴ China's State Council, Circular of the State Council on Banning the Trade of Rhinoceros Horns and Tiger Bones, May 29, 1993. http://www.lawinfochina.com/display.aspx?lib=law&id=12109&CGid=.
- ¹⁶⁵ Kristin Nowell and Xu Ling, "Taming the Tiger Trade: China's Markets for Wild and Captive Tiger Products since the 1993 Domestic Trade Ban," *TRAFFIC East Asia*, 2007, v–vi, 39–40, 48.
- ¹⁶⁶ Kristin Nowell and Xu Ling, "Taming the Tiger Trade: China's Markets for Wild and Captive Tiger Products since the 1993 Domestic Trade Ban," TRAFFIC East Asia, 2007, v, 13–14.
- ¹⁶⁷ TRAFFIC, "Lifting Tiger Trade Ban a Catastrophe for Conservation," March 13, 2007. http://www.traffic.org/home/2007/3/13/lifting-tiger-trade-ban-a-catastrophe-for-conservation.html.
- ¹⁶⁸ Environmental Investigation Agency, "Hidden in Plain Sight: China's Clandestine Tiger Trade," February 2013, 28. https://eia-international.org/wp-content/uploads/EIA-Hidden-in-Plain-Sight-med-res.pdf; Kristin Nowell and Xu Ling, "Taming the Tiger Trade: China's Markets for Wild and Captive Tiger Products since the 1993 Domestic Trade Ban," TRAFFIC East Asia, 2007, 6, 10, 47; People's Republic of China Wildlife Protection Law, 1988. Translation. http://www.npc.gov.cn/wxzl/gongbao/2000-12/10/content 5004512.htm.
- 169 Environmental Investigation Agency, "Cultivating Demand: The Growing Threat of Tiger Farms," November 2017, 10. https://eia-international.org/report/cultivating-demand-growing-threat-tiger-farms.
- ¹⁷⁰ Environmental Investigation Agency, "Hidden in Plain Sight: China's Clandestine Tiger Trade," February 2013, 6. https://eia-international.org/wp-content/uploads/EIA-Hidden-in-Plain-Sight-med-res.pdf.
- ¹⁷¹ Environmental Investigation Agency, "Hidden in Plain Sight: China's Clandestine Tiger Trade," February 2013, 9–10. https://eia-international.org/wp-content/uploads/EIA-Hidden-in-Plain-Sight-med-res.pdf.
- ¹⁷² Environmental Investigation Agency, "Hidden in Plain Sight: China's Clandestine Tiger Trade," February 2013, 10. https://eia-international.org/wp-content/uploads/EIA-Hidden-in-Plain-Sight-med-res.pdf.
- ¹⁷³ China State Council, State Council Notification Concerning the Strict Control of Rhinoceros and Tigers and Operations Utilizing Their Products, October 29, 2018. Translation. http://www.gov.cn/zhengce/content/2018-10/29/content_5335423.htm.
- ¹⁷⁴ China State Council, State Council Notification Concerning the Strict Control of Rhinoceros and Tigers and Operations Utilizing Their Products, October 29, 2018. Translation. http://www.gov.cn/zhengce/content/2018-10/29/content_5335423.htm.
- 175 WildAid, "China Upholds 1993 Ban on Rhino Horn, Tiger Bone Trade," November 13, 2018. https://wildaid.org/china-upholds-1993-ban/; Environmental Investigation Agency, "China's 'Legal Trade' Announcement Could Sound the Death Knell for Tigers and Rhinos," October 29, 2018. https://eia-international.org/chinas-legal-trade-announcement-sound-death-knell-tigers-rhinos/; World Wildlife Fund, "WWF Statement in Response to China Postponing New Regulation on Domestic Trade in Tiger Bone and Rhino Horn," November 12, 2018. http://wwf.panda.org/wwf_news/press_releases/?338173/WWF-statement-in-response-to-China-postponing-new-regulation-on-domestic-trade-in-tiger-bone-and-rhino-horn.
- World Wildlife Fund, "WWF Statement on China's Legalization of Domestic Trade in Tiger Bone and Rhino Horn," October 29, 2018. http://wwf.panda.org/wwf_news/press_releases/?337353/WWF-statement-on-Chinas-legalization-of-domestic-trade-in-tiger-bone-and-rhino-horn.
- 177 Simon Denyer, "Tiger Farms Stoke Chinese Demand for Tiger Wine and Rugs, Putting Wild Cats in Peril," Washington Post, January 1, 2015. https://www.washingtonpost.com/world/asia_pacific/tiger-farms-stoke-chinese-demand-for-tiger-wine-and-rugs-putting-wild-cats-in-peril/2015/01/01/6f292ea0-796b-11e4-9721-80b3d95a28a9_story.html?utm_term=.9480810c8163; Environmental Investigation Agency, "China's Wildlife Protection Law." https://eia-international.org/our-work/environmental-crime-and-governance/illegal-wildlife-trade/tigers-other-asian-big-cats/chinas-draft-wildlife-protection-law.
- ¹⁷⁸ Environmental Investigation Agency, "China's Wildlife Protection Law." https://eia-international.org/our-work/wildlife/tigers/tiger-farming/chinas-wildlife-protection-law/.

- 179 Simon Denyer, "Tiger Farms Stoke Chinese Demand for Tiger Wine and Rugs, Putting Wild Cats in Peril," Washington Post, January 1, 2015. https://www.washingtonpost.com/world/asia_pacific/tiger-farms-stoke-chinese-demand-for-tiger-wine-and-rugs-putting-wild-cats-in-peril/2015/01/01/6f292ea0-796b-11e4-9721-80b3d95a28a9_story.html?utm_term=.9480810c8163; Environmental Investigation Agency, "China's Wildlife Protection Law." https://eia-international.org/our-work/wildlife/tigers/tiger-farming/chinas-wildlife-protection-law/.
- ¹⁸⁰ Simon Denyer, "Tiger Farms Stoke Chinese Demand for Tiger Wine and Rugs, Putting Wild Cats in Peril," Washington Post, January 1, 2015. https://www.washingtonpost.com/world/asia_pacific/tiger-farms-stoke-chinese-demand-for-tiger-wine-and-rugs-putting-wild-cats-in-peril/2015/01/01/6f292ea0-796b-11e4-9721-80b3d95a28a9_story.html?utm_term=.9480810c8163; Kristin Nowell and Xu Ling, "Taming the Tiger Trade: China's Markets for Wild and Captive Tiger Products since the 1993 Domestic Trade Ban," TRAFFIC East Asia, 2007, 30.
- 181 Environmental Investigation Agency, "China's Wildlife Protection Law." https://eia-international.org/our-work/wildlife/tigers/tiger-farming/chinas-wildlife-protection-law/.
- ¹⁸² Environmental Investigation Agency, "Cultivating Demand: The Growing Threat of Tiger Farms," November 2017, 9. https://eia-international.org/report/cultivating-demand-growing-threat-tiger-farms.
- 183 Environmental Investigation Agency, "Hidden in Plain Sight: China's Clandestine Tiger Trade," February 2013, 2, 21. https://eia-international.org/wp-content/uploads/EIA-Hidden-in-Plain-Sight-med-res.pdf.
- ¹⁸⁴ Nick Davies and Oliver Holmes, "China Accused of Defying its Own Ban on Breeding Tigers to Profit from Body Parts," Guardian, September 27, 2016. https://www.theguardian.com/environment/2016/sep/27/china-accused-of-defying-its-own-ban-on-breeding-tigers-to-profit-from-body-parts.
- ¹⁸⁵ Convention on International Trade in Endangered Species of Wild Fauna and Flora, "Position Statement on Conservation of and Trade in Tigers—China," March 2010. https://www.cites.org/sites/default/files/common/cop/15/inf/E15i-16.pdf.
- ¹⁸⁶ World Wildlife Fund, "WWF Statement on China's Legalization of Domestic Trade in Tiger Bone and Rhino Horn," October 29, 2018. http://wwf.panda.org/wwf_news/press_releases/?337353/WWF-statement-on-Chinas-legalization-of-domestic-trade-in-tiger-bone-and-rhino-horn.
- ¹⁸⁷ World Wildlife Fund, "Species: Rhino," 2018. https://www.worldwildlife.org/species/rhino.
- ¹⁸⁸ Varun Vira and Thomas Ewing, "Ivory's Curse: The Militarization and Professionalization of Poaching in Africa," Center for Advanced Defense Studies, April 2014, 14.
- ¹⁸⁹ United Nations Environment Program Wild for Life Campaign, "Goodbye, Vaquitas: A Call to Prevent Mass Extinction," July 13, 2018. https://wildfor.life/goodbye-vaquitas-a-call-to-prevent-mass-extinction.
- 190 C. Nellemann et al., "The Rise of Environmental Crime: A Growing Threat to Natural Resources, Peace, Development, and Security," United Nations Environment Programme and RHIPTO Rapid Response-Norwegian Center for Global Analyses, 2016, 7. https://wedocs.unep.org/bitstream/handle/20.500.11822/7662/-
 - The_rise_of_environmental_crime_A_growing_threat_to_natural_resources_peace%2c_development_and_security-2016environmental_crimes.pdf.pdf?sequence=3&isAllowed=y.
- 191 Varun Vira and Thomas Ewing, "Ivory's Curse: The Militarization and Professionalization of Poaching in Africa," Center for Advanced Defense Studies, April 2014, 10.
- ¹⁹² Varun Vira and Thomas Ewing, "Ivory's Curse: The Militarization and Professionalization of Poaching in Africa," Center for Advanced Defense Studies, April 2014, 5.
- ¹⁹³ International Fund for Animal Welfare, "Criminal Nature: The Global Security Implications of the Illegal Wildlife Trade," June 2013, 20–21. https://s3.amazonaws.com/ifaw-pantheon/sites/default/files/legacy/ifaw-criminal-nature-UK.pdf.
- World Wildlife Fund and TRAFFIC Wildlife Crime Initiative, "Strategies for Fighting Corruption in Wildlife Conservation: A Primer," 2015. http://www.traffic.org/general-reports/wci_strategies_for_fighting_corruption_wildlife_conservation.pdf.
- 195 International Fund for Animal Welfare, "Criminal Nature: The Global Security Implications of the Illegal Wildlife Trade," June 2013, 9. https://s3.amazonaws.com/ifaw-pantheon/sites/default/files/legacy/ifaw-criminal-nature-UK.pdf.
- ¹⁹⁶ Officials at the U.S. Department of State, interview with Commission staff, April 26, 2018; Officials at the U.S. Department of State, interview with Commission staff, April 18, 2018.
- ¹⁹⁷ Environmental Investigation Agency, interview with Commission staff, April 25, 2018; Big Cat Public Safety Act, H.R. 1818, introduced March 30, 2017. https://www.congress.gov/bill/115th-congress/house-bill/1818/text?r=3.
- ¹⁹⁸ Environmental Investigation Agency, interview with Commission staff, April 25, 2018.
- ¹⁹⁹ Officials at the U.S. Department of the Interior, interview with Commission staff, April 26, 2018.
- ²⁰⁰ Jacob Phelps et al., "Boosting CITES," *Science* 330 (2010).
- ²⁰¹ Officials at the U.S. Department of the Interior, interview with Commission staff, April 26, 2018.
- ²⁰² Liu Qin, "China's Ivory Sales Ban Shows Need for Asia-Wide Strategy," Chinadialogue, April 24, 2018. https://www.chinadialogue.net/article/show/single/en/10603-China-s-ivory-sales-ban-shows-need-for-Asia-wide-strategy; Vincent Nijman, Ming Xia Zhang, and Chris R. Shepherd, "Pangolin Trade in the Mong La Wildlife Market and the Role of Myanmar in the Smuggling of Pangolins into China," Global Ecology and Conservation 5 (January 2016): 119. https://ac.els-cdn.com/S2351989415300342/1-s2.0-S2351989415300342-main.pdf?_tid=ac475d2f-272a-4143-a925-a09a3e1b6f65&acdnat=1522958020_9f953b8c3b633be8e9dcd4ec2c2080cb.
- ²⁰³ Association of Zoos & Aquariums, "Association of Zoos and Aquariums and U.S. Wildlife Trafficking Alliance Join Forces," February 14, 2018. https://www.aza.org/aza-news-releases/posts/association-of-zoos-and-aquariums-and-us-wildlife-trafficking-alliance-join-

- forces; TRAFFIC, "Tourism Industry in China Says 'No' to Illegal Wildlife Trade," March 3, 2016. http://www.traffic.org/home/2016/3/3/tourism-industry-in-china-says-no-to-illegal-wildlife-trade.html.
- ²⁰⁴ Yu Xiao, Jing Guan, and Ling Xu, "Wildlife Cybercrime in China: E-Commerce and Social Media Monitoring in 2016," TRAFFIC, May 2017, 10. http://www.trafficj.org/publication/17_Briefing_Wildlife_Cybercrime_in_China.pdf.
- ²⁰⁵ TRAFFIC, "Leading Tech Companies Unite to Stop Wildlife Traffickers," March 7, 2018. http://www.traffic.org/home/2018/3/7/leading-tech-companies-unite-to-stop-wildlife-traffickers.html.

²⁰⁶ TRAFFIC, "Leading Tech Companies Unite to Stop Wildlife Traffickers," March 7, 2018. http://www.traffic.org/home/2018/3/7/leading-tech-companies-unite-to-stop-wildlife-traffickers.html.

- Vincent Nijman, Professor, Oxford Brookes University, interview with Commission staff, April 4, 2018; United Nations Office on Drugs and Crime, "Enhancing the Detection, Investigation, and Disruption of Illicit Financial Flows from Wildlife Crime," 2017, 25. https://www.unodc.org/documents/southeastasiaandpacific/Publications/2017/FINAL_-_UNODC_APG_Wildlife_Crime_report.pdf.
- ²⁰⁸ Convention on International Trade in Endangered Species of Wild Fauna and Flora, Seventeenth Meeting of the Conference of the Parties, "Prohibiting, Preventing, and Countering Corruption Facilitating Activities Conducted in Violation of the Convention," October 5, 2016. https://cites.org/sites/default/files/eng/cop/17/WorkingDocs/E-CoP17-28.pdf.
- ²⁰⁹ Financial Action Task Force, "International Standards on Combating Money Laundering and the Financing of Terrorism and Proliferation: The FATF Recommends," February 2012, 24. http://www.fatf-gafi.org/media/fatf/documents/recommendations/pdfs/FATF_Recommendations.pdf.
- ²¹⁰ Environmental Investigation Agency, interview with Commission staff, April 25, 2018.
- ²¹¹ Peter J. Li, Associate Professor, University of Houston-Downtown, interview with Commission Staff, April 2, 2018.
- ²¹² Officials at the U.S. Department of State, interview with Commission staff, April 18, 2018.
- ²¹³ Vincent Nijman, Professor, Oxford Brookes University, interview with Commission staff, April 4, 2018.
- ²¹⁴ Elephant Action League, "Grinding Rhino: Operation Red Cloud Investigative Report: An Undercover Investigation on Rhino Horn Trafficking in China and Vietnam," July 2017, 6. https://elephantleague.org/wp-content/uploads/2017/07/Grinding-Rhino-July2017-Elephant-Action-League.pdf.
- ²¹⁵ Justine E. Hausheer, "Poachers Are Killing Asian Elephants for Their Skin," *Nature*, May 21, 2018. https://blog.nature.org/science/2018/05/21/poachers-are-killing-asian-elephants-for-their-skin/.
- ²¹⁶ U.S. House of Representatives International Conservation Caucus, What's at Stake? https://royce.house.gov/internationalconservation/.
- 217 Pervaze A. Sheikh and M. Lynne Corn, "The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)," Congressional Research Service, September 21, 2016. https://fas.org/sgp/crs/misc/RL32751.pdf; U.S. Fish and Wildlife Service, Multinational Species Conservation Acts. https://www.fws.gov/international/laws-treaties-agreements/us-conservation-laws/multinational-species-conservation-acts.html; U.S. Fish and Wildlife Service, Lacey Act. https://www.fws.gov/international/laws-treaties-agreements/us-conservation-laws/lacey-act.html; U.S. Fish and Wildlife Service, Pelly Amendment. https://www.fws.gov/international/laws-treaties-agreements/us-conservation-laws/pelly-amendment.html; U.S. Department of State, 2017 END Wildlife Trafficking Report: Report to Congress on Eliminate, Neutralize, and Disrupt Wildlife Trafficking Act of 2016; 2017 Report to Congress, November 16, 2017. https://www.state.gov/e/oes/rls/rpts/275703.htm.
- ²¹⁸ U.S. Government Accountability Office, Combating Wildlife Trafficking: Agencies Are Taking a Range of Actions, but the Task Force Lacks Performance Targets for Assessing Progress, September 2016, 10, 19, 21, 26, 30
- ²¹⁹ INTERPOL, "Wildlife Crime: Global Seizures and Arrests in Transcontinental Operation," June 20, 2018; U.S. National Park Service, Interagency Investigation Captures Men Trafficking Horns from Endangered Black Rhinoceros, April 6, 2018; U.S. Department of Justice Environment and Natural Resources Division, ENRD Summary of Division Accomplishments Fiscal Year 2017, 2017, 28; U.S. Attorney's Office, Central District of California, Operation Jungle Book Targets Wildlife Trafficking, Leading to Federal Criminal Cases and Recovery of Numerous Animal Species, October 20, 2017; INTERPOL, "Anti-Wildlife Trafficking Operation Results in Global Arrests and Seizures," March 2, 2017; U.S. Fish and Wildlife Service, Operation Crash Nabs Traffickers, Brings Money to Rhino Conservation Projects, August 26, 2016.