

# Wildlife Trafficking 101: Everything You Need to Know

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## Quick Key Facts

1. Wildlife trafficking is the [second biggest direct threat to species](#), following habitat destruction.
2. It's a huge business with smuggled goods valued at \$10 billion a year, and involves tens of thousands of species and millions of wild plants and animals.
3. The International Union for Conservation of Nature (IUCN) found that [958 species are at risk of extinction](#) directly because of international trade.
4. Wildlife trafficking not only impacts plant and animal populations, but also humans who rely on wildlife for vital resources and functional ecosystems for major industries.
5. Of the 1.2 million African elephants that lived in 1980, fewer than 420,000 remain, largely due to illegal poaching.
6. Tigers have disappeared from 95% of their original range in Africa, and only about 4,000 to 5,000 still exist in the wild.
7. Pangolins are the most heavily trafficked wild mammal; one million have been poached from the wild in the past 15 years.
8. Species of both cacti and orchids are faced with extinction from overexploitation.

## What Is Wildlife Trafficking?

While there is no universal treaty that defines wildlife crime, in a broad sense, wildlife trafficking is generally defined as a crime that involves the illegal trade, [poaching](#), smuggling, capture, or collection of protected, [endangered](#), and managed wildlife, including both animals and plants.

It's important to note that not *all* [wildlife trade](#) is a crime; some trade is legal, and is done in a manner that doesn't harm wild populations. Many wild plants and animals are caught or harvested legally to sell as pets, food, ornamental plants, or to make goods like leather and medicine. Trafficking, on the other hand, refers to circumstances where the manner of collection or amount collected is unregulated or otherwise outside legal bounds.

### Scope of Wildlife Trafficking

When you think of wildlife trafficking, you might envision well-known targets of poaching like tigers and elephants, but wildlife trafficking involves tens of thousands of species and millions of wild plants and animals. It's a huge business — often relying on the same international criminal networks of drug and human trafficking — with smuggled goods valued at \$10 billion a year. The State Department estimates that it is the [third largest type of illegal trade](#), after drugs and weapons.

While wildlife trafficking isn't a new industry, it's become a growing problem. Rhino poaching increased [7,700% between 2007 and 2013](#), and elephant numbers throughout Africa have plummeted 76% since 1980 largely due to the [huge demand for elephant ivory](#). According to the Wildlife Conservation Society, unreported/unregulated fisheries are worth an estimated \$4.2 to \$9.5 billion a year, illegal lumber trade \$7 billion, and other illicit wildlife trafficking \$7.8 to \$10 billion.

Wildlife trade is a global industry, but there are some [major hotspots](#) where supply and/or demand is especially high: China (especially along its international borders), in the trade hubs of East/Southern Africa and Southeast Asia, the eastern European Union border, and some areas of Mexico, the Caribbean, Indonesia, New Guinea, and the Solomon Islands.

### **Why Does Wildlife Trafficking Happen?**

#### Fraudulent Documentation

Identifying illegally traded wildlife products is complicated. In these markets, not all goods are completely prohibited; some are legally collected and sold, as demonstrated through a legal licensing system. However, fraudulent documents are sometimes used to bring these goods to market, where the products are bought commercially without consumers even knowing that it's illegal. Because legal markets are often covers for illegal ones, it's nearly impossible sometimes to distinguish legal products from illegal ones once it's within a country. Ivory is a prime example of this; a recent report by the NRDC found that [90% of ivory in Los Angeles was most likely obtained illegally](#), probably unbeknownst to many traders and consumers involved.

#### High Value Products

Illegal trade of wildlife is usually driven by high demand for rare or protected species. Our taste for trafficked plants and animals is manyfold: consumers want rare animals as pets or to add unusual plants to their collection; the skins and hides from animals like crocodiles and tigers might be wanted for rugs, clothes, and bags; body parts are used for traditional medicines, or, like shark fins, are considered edible delicacies; materials like ivory and rosewood have become a status symbol and are used for decor. Given the high profit margins of these products, people experiencing extreme poverty see them as a lucrative financial opportunity. Illegally traded products are sometimes a supplemental — or even primary — source of income for people in wildlife trade hotspots around the globe.

## Lack of Consequences and Ineffective Law Enforcement

The lack of consequences for illegal trading is a primary reason why criminal wildlife-trading networks often continue to function. Corruption, weak laws and judicial systems, and small sentences make wildlife trafficking a low-risk business for those involved. Lower-level workers — like poor locals trying to make money — are often the ones who are caught and punished, leaving the higher-ups in the network free to continue trafficking. Inadequate law enforcement also allows the practice to continue. In many cases, it's a combination of these factors that allows these products to come to market.

Take African Elephant ivory, for example. Insufficient enforcement, corruption among the enforcement that *is* there, the danger posed by armed poachers, and a very well organized and well-funded network of traffickers all allow trafficking to continue. There also aren't very strong penalties for the traders; less than 1% of shipping containers unloaded at the port in Hong Kong are actually inspected for smuggled ivory. All of this culminates in a [high incentive for smuggling](#).

## **Why Is Wildlife Trafficking a Problem?**

### Overexploitation and Species Extinction

Many trafficked species are also traded through legal means, but illegal trade over-exploits species to the point where their very survival is threatened. Species often can't replenish at the rate they're being taken, ultimately leading to their extinction. This phenomenon is evident in the dwindling populations of tigers, elephants, and rhinoceroses, but it goes beyond these more well-known cases. Between 1970 and 2000, populations of species on earth [declined by 40% on average](#), says the WWF, and according to the NRDC, 60% of the planet's vertebrate wildlife populations have been lost since 1970. The International Union for Conservation of Nature (IUCN) found that [958 species are at risk of extinction](#) directly because of international trade.

### Harm to Ecosystems

Wildlife trade is the second largest threat to the biodiversity of the planet after habitat loss, and it often impacts ecosystems that may already be facing other problems like pollution, deforestation, dredging, and other forms of habitat loss. Overexploitation throws off the balance of ecosystems by removing a key species, creating a ripple effect through the food chain and putting the survival of a myriad other plants and animals in jeopardy.

Trafficking also introduces non-native species to ecosystems that can become invasive and greatly alter food chains as they compete with native species for resources. [Burmese pythons](#) are a prime example of this phenomena: a popular exotic pet in the 1980s, many owners released these snakes into the Florida Everglades when they became too large or difficult to care for. Now, the pythons prey on native and endangered species in the Everglades, seriously altering this delicate ecosystem.

While harvesting plant and animal species illegally, non-target species are often killed in the process. When fishing gear is released in the oceans to catch a certain type of fish, other marine life will get caught in the gear and discarded by poachers; similarly, other animals might get caught in traps on land that were meant for the target species. It's estimated that more than 25% of animals caught across the globe are incidental/unwanted, and end up being discarded.

## **Harm to Humans**

Wildlife trafficking not only impacts plant and animal populations, but humans as well.

### Wildlife as Vital Resources

Wildlife populations are necessary for lots of people around the world, especially in poor and economically disadvantaged communities. Rural households might depend on trees for fuel, and animals for protein sources and traditional medicine. In Gabon — a country on the west coast of Central Africa — for example, 60% of protein is derived from wild meat. [Four billion people around the world](#) also rely on natural medicines for health care, and these ingredients can be lost as biodiversity diminishes.

### Loss of Major Industries

Global economies often rely on balanced wildlife populations and healthy ecosystems for their major industries. Deforestation and illegal logging in Kenya, for example, has threatened the country's ability to grow tea: a vital industry that brings in millions of dollars to the country. The Mau Forest Complex — a forest needed for catching and distributing rainwater that's used to irrigate fields — has [declined in size by 40%](#). By some estimates, the Mau is worth \$163 million in services for Kenya's tea industry, which is directly threatened by this illegal logging.

### Spread of Disease

According to the World Health Organization, of all the new infectious diseases that have affected humans over the past 30 years, [75% originate in animals](#). Species pass through many hands along the paths of the illegal wildlife trade, and pathogens can spread between animals and humans that would not normally be coming in contact. There is an even greater risk of spreading diseases when animals are smuggled without being properly inspected. The SARS coronavirus outbreak in the early 2000s, for example, involved bats and small carnivores in Guangdong. The COVID-19 pandemic has shown us how devastating zoonotic diseases can be. While understandings about the origin of the virus are still evolving, the pandemic has shown how crucial it is that we prevent further outbreaks caused by human-animal interaction.

## **What Wildlife Species Are Trafficked?**

Illegal wildlife trafficking is an issue that spans the globe and often involves multiple countries, and because nation-specific lists of protected species usually focus mainly on native species, it is difficult for countries to challenge the import or sale of other possibly-illegal wildlife products, since they aren't covered by national legislation. To combat this difficulty, wildlife trade is regulated internationally by the United Nations' Convention on International Trade in Endangered Species of Wild Fauna and Flora (otherwise known as CITES). The Convention has 170 member countries, which follow a common set of rules, basically providing the framework for protecting certain species against overexploitation through trafficking. [CITES maintains a list of 38,700 species](#) — 5,950 species of animals and 32,800 species of plants — that are threatened by international trade.

While not a complete and comprehensive list, the following animals and plants are among the species regulated by CITES.



## Animals

### African Elephants Tusks

African elephants are desirable mainly for their [ivory](#) tusks, which are used to make chess sets, jewelry, and other products of aesthetic value. About 70% of ivory ends up in China, but it is trafficked illegally all over the globe. A 2015 report commissioned by the NRDC found that [90% of ivory in Los Angeles and 80% in San Francisco is likely illegal](#). The international ivory trade ban took effect in 1990, and a lot of legal markets have since closed — including in the U.S., China, and the UK, which have domestic ivory bans — so poachers can't pass off illegal ivory as legal.



*African elephants in Amboseli, Kenya on November 17, 2021. Eric Lafforgue / Art in All of Us / Corbis via Getty Images*

The number of trafficked African elephants has been declining since 2011, but their populations are still seriously threatened by illegal trade. Of the 1.2 million African elephants that lived in 1980, less than 420,000 remain. At the rate they are being killed, the population is projected to go extinct in 10 years. The vast majority of [African elephant poaching](#) takes place in Africa, where their herds wander through 37 countries. CITES reports that in Africa in 2012, 25,000 elephants were killed, and that poachers kill 30 elephants a day in Tanzania alone.

This high level of [poaching has altered elephant behavior in the wild](#). Survivors of poaching become distressed, and are also more antagonizing towards humans. They mourn their partners who are now deceased, participating in rituals like carrying their bones or tusks. Changes to their behavior also impacts their matriarchal social structure, and the species then has less success breeding.

### Pangolin Scales

Have you ever heard of a Pangolin? These scaly anteaters live in Asia and Africa, with four different species on each continent. They are nocturnal and relatively reclusive animals, as well as the only mammal completely covered in scales. Arguably, they are now the most heavily trafficked wild mammal; it's believed that one million have been taken from the wild in the past 15 years. Pangolins are desirable for their meat — considered a delicacy in some Asian countries — and their scales, which have been a part of traditional Nigerian and Chinese medicine.



*A pangolin in an animal sanctuary in Zimbabwe. JEKESAI NJIKIZANA / AFP via Getty Images*

### Rhinoceros Horns

Rhino horns are one of the most expensive substances on the planet, even though scientists say its [reputation as a medicinal substance is a falsehood](#). The recent myth that their horn could cure cancer led to huge amounts of poaching in South Africa, driving the price up to the point where it began to rival gold as a commodity. They are also sold for their artistic and investment value. Most is destined for China and Vietnam and is smuggled by airplane. All five species of Rhinoceros are threatened with extinction, and only 25,000 animals are left. 75% exist in South Africa, where both drought and poaching have led to their decline.





*Two South African white rhinoceros at the Aurora Zoo in Guatemala City, Guatemala on Sept. 22, 2022. JOHAN ORDONEZ / AFP via Getty Images*

### Live Reptiles

Crocodylians, lizards, snakes, tortoises, and freshwater turtles are among the most trafficked reptiles. Many are desired for their skin and shells for decor or clothing, or their meat and venom for food or medicine, but live reptiles are also wanted by zoos, for further breeding of the species, or for household pets. In 2019, [4,000 reptiles were seized](#) from airports, breeding facilities, and pet stores: the biggest bust of its kind to date.



*A yellow-footed tortoise, a victim of wildlife trafficking, in Bogota, Colombia on Oct. 8, 2018. Juancho Torres / Getty Images*

## Big Cats

Except for a few small exceptions, the international commercial trade of all big cat species (except African lions) is illegal, and tigers make up the majority of those traded. Poaching is the greatest threat to tigers; they've disappeared from 95% of their original range in Africa, and only about 4,000 to 5,000 still exist in the wild. These cats have been traded for a long time as live pets, the skin and teeth for decorations, and their bones for medicines in East Asia. Tiger bones especially are in high demand. Because of the strength and power of the animal, tiger bone supplements have been long sought after, and are thought to help with inflammation and other bone, ligament, and joint issues. The bones are usually ground into powder and made into pills, or added to camphor and menthol to make tiger balm.

Other big cats are trafficked too — leopards, snow leopards, clouded leopards, lions, and jaguars among them — but their products are mostly pawned off as tiger products. Approximately 300 cheetahs are removed illegally from their habitats each year, which results in a 4% annual drop in their population.



*A Nature Conservation Agency officer holds a leopard cub after the organization and the police arrested a group of wildlife traffickers in Surabaya, Indonesia on March 4, 2022. JUNI KRISWANTO / AFP via Getty Images*

## European Glass Eels

Not only land creatures are trafficked; the ocean is also a highly poached landscape. The market for European glass eels is relatively new, but growing. Eels spend most of their lives in freshwater, then return to the sea to mate. These eels have not been successfully bred in captivity (although it's believed that they breed in the Sargasso Sea), so once the creatures in the wild have reached the "glass eel" stage of maturity and their bodies become transparent, they are in high demand for aquaculture. Glass eels are an important food source in Japan, and are sometimes produced and consumed legally, but the legal market is often fed by illegal sources that bring them their stock.





*Glass eels caught off the coast of France. Patrick Pleul / picture alliance via Getty Images*

### Sturgeons

These giant fish have been around since the Jurassic period, and grow up to 10 feet long. In April of 2022, authorities in Sacramento, California busted a major sturgeon poaching operation in the area, exposing the new threat to the species. They are often poached for wild-caught caviar and meat; according to the WWF, one-third of all caviar and meat products sold in the lower Danube region were sold illegally. This July, the International Union for Conservation of Nature (IUCN) released an assessment confirming that [all 26 species of sturgeon are now threatened with extinction](#).



*Sturgeons in an aquarium in Germany. Sean Gallup / Getty Images*

## Plants and Natural Resources

Along with these animals, many species of plants are also illegally traded. Trafficking plants is just as detrimental as trafficking animals: the populations of endangered plants are put in jeopardy, domestic agriculture is threatened by unfamiliar diseases and insects, and the non-native plants might become invasive.

### Cacti

30% of the world's 1,5000 cactus species currently face extinction, and poaching is a culprit.

Houseplants are a hot commodity, especially given their high exposure via social media. Cacti are among the most trafficked plants, and cacti enthusiasts will pay huge sums for rare and unusual species. Cacti are very slow growing, highly localized plants which makes them very sensitive to over-harvesting, but also makes them very attractive to serious collectors. In 2020, a major bust in Italy called [Operation Atacama](#) seized 1,000 of the world's rarest cactuses from a collector, valued at over \$1.2 million. Most of these protected plants came from Chile, from which they cannot be legally exported. Many seized plants are taken as "refugee plants" to be raised in greenhouses, as they might soon be extinct in the wild and botanists want to ensure their survival.



*Many rare plant species, including cacti, are poached and traded illegally. Janine Stephen / picture alliance via Getty Images*

### Orchids

These beautiful, flowering plants are a part of the largest plant family with over 30,000 species, and [highly desirable](#) as decorative plants, or, less often, for traditional food and medicine. Orchids have been kept as ornamental plants for thousands of years. Collectors in Victorian Europe were said to have suffered from "orchidelirium" (or orchid fever), and paid huge sums for rare orchids. According to the BBC, species of orchids in Southeast Asia are [extinct in the wild](#) because of the modern illegal orchid



trade. Some orchid species have been [harvested by traffickers before they're even identified by scientists](#), showing both the huge breadth of the species and the demand for them. Of all the species listed by CITES, in fact, [70% are species of orchids](#).



*Wild orchids in Brandenburg, Germany. Patrick Pleul / picture alliance via Getty Images*

### Rosewood Timber

Rosewood timber is not just one type of wood; it's a trade term for a range of tropical hardwoods, encompassing hundreds of different species. This makes it hard to nail down a specific definition of the product for regulation purposes. When measured by value or volume, rosewood is the most trafficked form of flora or fauna globally.

Like many products, rosewood enters supply chains legally. In the past decade, [most rosewood](#) has come from Africa and been imported to China, with a smaller percentage going to India.

Among other uses, it is a desirable material for making classical Chinese furniture (called hongmu); a single bed made from Madagascar-grown rosewood can fetch as much as \$1 million. Rosewood takes decades to grow to a size that is commercially desirable, and centuries to reach full maturity, so illegal harvesting has the potential to be devastating.





*Logs of Pacific rosewood taken from a rainforest in the Solomon Islands. Auscape / Universal Images Group via Getty Images*

## Threat to Global Security and Recent Efforts Against Wildlife Trafficking

### Wildlife Trafficking as a Threat to Global Security

Wildlife trafficking presents a threat to the stability of ecosystems, but it can also contribute to the financial instability of countries. In some Central African countries — like the Democratic Republic of the Congo, for example — poaching and trafficking of both animals and lumber is used as a way for dangerous armed groups to raise funds. Quelling illegal trade is therefore also crucial to maintaining financial stability in these regions.

### Recent Efforts to Combat Wildlife Trafficking

There have been many national and international efforts to stop wildlife trafficking, besides the efforts of CITES. The Department of Justice's [Environment and Natural Resources Division \(ENRD\)](#) is responsible for prosecuting international wildlife trafficking crimes, usually working with the Endangered Species Act (ESA) and the Lacey Act. In 2021, the [Eliminate, Neutralize, and Disrupt Wildlife Trafficking Reauthorization and Improvements Act](#) was passed, which permanently reauthorized the activities of the Presidential Task Force on Wildlife Trafficking. Advanced technologies also are being developed to figure out the origins of trafficked products. In California, for example, a forensics lab tests samples of the blood, tusks, and saliva of exotic animals to figure out where they came from, and therefore [learn where species are being collected illegally](#).

### **How to Be a Part of the Solution**

1. **Push governments to protect animal populations threatened by poaching.** Contact your representatives and encourage them to vote in favor of legislation that prioritizes the protection of endangered species and illegally trafficked flora and fauna. Similarly, recognize the role that

climate change and habitat destruction play in wildlife trafficking, and how it puts additional stresses on threatened species. Vote for candidates with a history of supporting environmental causes and who run on a platform of climate and environmental action.

2. **Reduce demand for illegal wildlife products.** Get the facts before making purchases and encourage others to do the same. Avoid buying animal products that are known for being illegally traded — such as ivory or certain animal skins — even when they are being sold through legal channels. Similarly, research exotic or reptilian pets before buying them. Make sure they are legally traded, and ask the seller if they can share any information on where the animals were sourced from. Look into [plant purchases](#) as well, especially if you're purchasing them online. If the photos depict them in the wild or freshly dug up, they might be illegal, especially if they are being shipped from faraway places.
3. **Support organizations that are working against wildlife trafficking.** Nonprofits and conservation groups like the [World Wildlife Fund](#), [TRAFFIC](#), and the [Wildlife Conservation Society](#), among many others, have a mission of ending wildlife trafficking. Consider donating to support their causes or get involved in their work.

### Takeaway

The scope of wildlife trafficking is wide, and includes a wide variety of flora and fauna. It not only endangers individual species and their greater food chains and ecosystems, but also people who depend upon wildlife for resources. It's a complex, multi-faceted issue that is worsened by many other problems including corruption, habitat destruction, and climate change — but, *you* can take action to combat wildlife trafficking by voting for representatives that support legislation to end the illegal wildlife trade, and by being a mindful consumer.

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