







WHAT ARE PANGOLINS?

➤ The shy, harmless pangolin is becoming increasingly well known for one reason: It's believed to be the world's most trafficked non-human mammal. Tens of thousands of pangolins are poached every year, killed for their scales for use in traditional Chinese medicine and for their meat, a delicacy among some ultra-wealthy in China and Vietnam. 1

Pangolins, sometimes known as scaly anteaters, are mammals in the order Pholidota, which means "covered with scales" in ancient Greek. The only extant family, *Manidae*, has three genera: *Manis, Phataginus*, and *Smutsia*. *Manis* comprises the four species found in Asia, while *Phataginus* and *Smutsia* include two species each, all found in sub-Saharan Africa. These species range in size from 30 to 100 cm. Several extinct pangolin species are also known. ²

They range in size from a large housecat to more than four feet long. They are largely covered in scales. When threatened, they roll into a ball, like an armadillo, and they can release a stinky fluid from a gland at the base of their tails as a defense mechanism.

Like anteaters, pangolins have long snouts and even longer tongues, which they use to lap up ants and termites they excavate from mounds with their powerful front claws. They're able to close their noses and ears to keep ants out when they're eating. Pangolins can consume up to 200,000 ants per day.³

Though they look and act a lot like anteaters and armadillos, pangolins are more closely related to bears, cats, and dogs.

Pangolins are solitary and active mostly at night. Most live on the ground, but some, like the black-bellied pangolin, also climb trees.

The only time pangolins spend time together is when they mate and bear young. Some pangolin fathers will stay in the den until the single offspring is independent. Babies are born with soft scales that harden after two days, but they will ride on their mothers' tails until they're weaned at about three months. They reach sexual maturity at about two years old. 4

- 1. National Geographic: https://www.nationalgeographic.com/ animals/mammals/facts/pangolins
- 2. Wikipedia: https://en.wikipedia.org/wiki/Pangolin
- 3. Save Vietnam's Wildlife: https://svw.vn/pangolin/
- **4.** National Geographic: https://www.nationalgeographic.com/animals/mammals/facts/pangolins



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LET'S TALK NUMBERS!

Of the eight species of pangolin, three are listed as critically endangered: (*M. pentadactyla*), Sunda pangolin (*M. javanica*), and Philippine pangolin (*M. culionensis*). Three are listed as endangered: White-bellied pangolin (*P. tricuspis*), Giant Ground pangolin (*Smutsia gigantea*), and Indian pangolin (*Manis crassicaudata*). Two are listed as vulnerable: Black-bellied pangolin (*Phataginus tetradactyla*) and Temminck's pangolin (*S. temminckii*). 5



All species face declining populations because of illegal trade. In 2016, the 186 countries party to the Convention on International Trade in Endangered Species (CITES), the treaty that regulates the international wildlife trade, voted to ban the commercial trade in pangolins.

Even so, around 100,000 are taken from the wild in Africa and Asia each year, driving a silent extinction. Populations have declined dramatically across the continent, with pockets of isolated wilderness areas retaining the last healthy populations. ⁶

THREATS

5. NIUCN Red List: https://www.iucnredlist.org/

- **6.** African Parks: https:// www.africanparks.org/savepangolins?gclid=EAIaIQobChMI_-Wku7-A-QIV4I1oCR3sFgGdEAAYASAAEgJ_jvD_ BwE
- 7. National Geographic: https://www.nationalgeographic.com/animals/mammals/facts/pangolins
- 8. Wikipedia: https://en.wikipedia.org/wiki/Pangolin
- 9. IUCN Red List: https://www.iucnredlist.org/species/12764/168392151
- 10. IUCN Red List: https://www.iucnredlist.org/species/12765/123585768



Pangolin scales are made of keratin, the same material that makes up fingernails, hair, and horn. Pangolin scales, like rhino horn, have no proven medicinal value, yet they are used in traditional Chinese medicine to help with ailments ranging from lactation difficulties to arthritis. The scales typically dried and ground up into powder, which may be turned into a pill.
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Pangolins are also hunted and eaten in Ghana and are one of the more popular types of bushmeat, while local healers use the pangolin as a source of traditional medicine. This, coupled with deforestation, has led to a large decrease in the numbers of pangolins. 8

Other threats include infrastructure development, habitat loss and fragmentation, and pesticide use. In China, major developments including hydropower stations and mining also pose a threat.

Taiwan and Hong Kong are exceptions where populations are not threatened by heavy hunting or poaching. The threats here include predation by feral dogs, roadkill and development, i.e. conversion of land for human use. In Taiwan, research suggests that s can become trapped in burrows or tree hollows, and is a cause of mortality, as is their capture in gin traps. ⁹

In Zimbabwe, and likely in other parts of the Temminck's pangolin range, artisanal mining is negatively impacting pangolins and other wildlife species. Artisanal mining results in the creation of deep mining pits which are invariably abandoned once the mineral reserves are depleted.

Temminck's Pangolins are regularly electrocuted on the lower strands of electrified fences in South Africa in particular, but also throughout their range where electrified fences are prevalent. In South Africa and Namibia, accidental bycatch of Temminck's Pangolins in gin traps that have been set for other species is also a threat, while in Zimbabwe substantial habitat alteration and loss of protected areas due to changes in the land use systems since independence has further impacted populations. ¹⁰









THE SOLUTIONS In recent years, pangolins have become a symbol of conservation. These unique, characterful animals have grown famous globally for their unusual looks and worthy plea; more resources and attention are being devoted to their conservation. Conservation organizations are working to improve our understanding of the pangolin's ecology and behavior. Pangolins are elusive mammals that wander their habitats alone, mostly at night. They have proven difficult to study but renewed efforts are underway to identify the distribution and ranges of pangolin populations, as well as how their ecosystems can be manipulated to ensure their survival in the wild. Surveys are underway to work out how many pangolins there are in the wild. Elsewhere, educational initiatives are raising awareness about pangolin conservation amongst local communities and rangers are being trained to help crack down on poaching in high-risk areas. Though the main aim is to stop pangolins from being taken from the wild in the first place, it is also important that rescue centers are given the training and resources necessary to rehabilitate live pangolins that have been seized from illegal traders.

OUR PROJECT



Our World Sustainability Organization, by means of its Friend of the Earth project, is raising awareness about the pangolin's story, which is not well known on a global scale. Many people still don't know what a pangolin is or why the animals are threatened. Sharing the pangolin's story will help in the development of a global community standing in unity against the illegal poaching of pangolins for meat and traditional Chinese medicine.

Another way to help the survival of this species is to collaborate with pangolin rescue and recovery centers. We have recently started a collaboration with Save Vietnam's Wildlife, a national Non-Profit Organization in Vietnam that was founded on the critical need for more effective solutions to secure a future for Vietnamese wildlife. At their rescue center in Vietnam, they work with six different native species including two of the pangolin species mentioned above. (Sunda pangolin and Chinese pangolin). Nine individuals live there and with our donation, they can be fed for a whole month. On the other hand, they offer "adoptions" so that people can contribute their grain of sand and thus we can make a difference in the extinction of this beautiful animal.



