SPECIES ON THE BRINK

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Conservationists are battling to save the pangolin – the mysterious, most trafficked mammal on the planet

What are pangolins?

Pangolins are the world's only scaly mammals (armadillos are not truly scaly – they are covered in bony plates). Their scales are made of keratin, the same fibrous protein found in rhino horn, hair and human fingernails, and overlap like artichoke leaves to create a tough armour against the crushing bites of lions, leopards and hyenas. Secretive, solitary and mostly nocturnal, pangolins are roughly the size of large domestic cats. Also known as scaly anteaters, they have powerful claws for ripping open ant and termite nests and long, sticky tongues to lick up their prey.



A Temminck's ground pangolin, rescued from poachers and released in Mozambique

How many species are there?

Eight – four in Asia (Sunda, Philippine, Chinese and Indian) and four in Africa (giant ground, white-bellied, Temminck's ground and black-bellied). But recent genetic research proposes two more species: the Indo-Burmese pangolin (found in India and possibly Nepal, Bhutan and Myanmar) and the aptly named Asian mysterious pangolin (which has never been formally observed in the wild, but identified from DNA studies of confiscated scales in Hong Kong).

Why are pangolins in the news?

They are the world's most trafficked mammals. The Asian pangolins have been poached to near-extinction, and trafficking networks have now shifted their attention to Africa. Trade is driven by an insatiable demand for the scales, which are sought after for traditional medicine in China, Vietnam and elsewhere in Southeast Asia (until recently, scales were available in Vietnam under health insurance schemes). The scales are sold for their medicinal properties – from treating psoriasis to working as an aphrodisiac – despite a severe lack of scientific evidence. Pangolins are also traded for their meat, which is considered a delicacy in many parts of Asia. Their tongues are put into soups, while their blood is drained for drinking and used in tonic wines. There is a significant black market in the USA for luxury leather goods used in the manufacture of cowboy boots, belts and wallets, and the animals are in demand for the exotic pet trade.

Are there any other threats?

Yes. In Africa, pangolins are hunted by locals for bushmeat (which is driving illegal trade in West Africa, with most scales being thrown away). Habitat destruction for agriculture and commercial operations, such as logging, mining and dam construction, is another major threat. Widespread road building has also brought a new menace – traffic deaths – as well as opening up previously remote areas to hunting and poaching.

How many are being killed?

Estimates vary widely. The most quoted figure is at least one million snatched from the wild in the past decade, but this is likely a gross underestimate. Shipments intercepted by Nigerian authorities alone, between 2010 and 2021, contained scales from around 800,000 dead pangolins. And the African Wildlife Foundation estimates that as many as 2.7 million African pangolins are killed every year. Sadly, pangolins make easy targets for poachers, who simply scoop them up when they roll into a defensive ball (the name 'pangolin' comes from the Malay word *pengguling*, meaning 'one who rolls up').

Aren't pangolins protected?

Yes and no. In 2016, pangolins were put on Appendix 1 of CITES (banning all international trade for commercial purposes). However, many range states have yet to enact legislation that meets CITES requirements and, where they are protected, enforcement is difficult. Hunting pangolins is illegal in Nigeria, for example, but it is now the world's largest hub for the criminal trade.

What else is being done to help them?

Anti-poaching patrols, law enforcement agencies and wildlife crime investigators dismantle poaching syndicates and intercept the illegal trade. Wildlife authorities are constantly seizing live pangolins from traders, and these are sent to rehabilitation centres to recover before being released back to the wild. Conservationists are working to reduce consumer demand and liaising with local communities to help them thrive without harming pangolins. Research is also vital – there is a severe lack of data on pangolin distribution, numbers and ecology, which is needed urgently for future planning.



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PANGOLIN: JEN GUYTON/NATUREPL.COM