

BIODIVERSITY

Pangolins and the Chinese Connection





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Throughout history the Chinese have viewed pangolins as an important source of medicine and food. The meat is consumed as a luxury food item, often to show social status and hospitality while the scales, which contain cholesterol, stearic acid, and fatty acid amide compounds are used in Traditional Chinese Medicine (TCM), combined with other ingredients, to promote blood circulation, stimulate lactation, disperse swelling and expel puss.

In 1998, China issued the Wild Animal Protection Law which, according to its Article 22, prohibited the sale and purchase of nationally protected wild animals and their products. An exception was made for those that were to be used for the purposes of scientific research, captive breeding, exhibition and other special cases -- the latter including TCM.

Article 22 also prohibited the eating of pangolins, but allowed for their use in TCM. This continued the threat of extinction on the Asian populations such that, in 2000, a “zero quota” was put in place for trade in the Asian pangolin species.

In November 2007, China further regulated the use of pangolins with the issuing of ‘A Notice on

This small animal, a pangolin, has become the mostly heavily traded wildlife product in the world.





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Enhancing the Protection on Resources of Saiga Antelope, Pangolin and Rare Snake’, as well as the ‘Regulating on their Products for Medicine Use’ requiring pangolin scales only to be used for clinical applications at designated hospitals and for the manufacturing of Chinese patented medicines.

Currently pangolin scales can only be used in around 700 licensed hospitals and by 209 medical companies who have been approved to produce 66 different kinds of Chinese patented medicine containing pangolin.

After the Notice was issued, the authorities decided to allow a domestic consumption of scales of around 25 tonnes, which would come

TOP LEFT: Cooking a pangolin.

TOP RIGHT: Pangolin wine

BELOW: Pangolin soup

THIS MAKES IT THE MOST HEAVILY TRADED WILDLIFE PRODUCT IN THE WORLD -- WELL AHEAD OF ELEPHANT IVORY AND RHINO HORN.

from verified stockpiles or other legal sources, such as legal imports from African countries. During the period 2008–2015, the average consumption was around 26,600 kg a year.

Despite the trade restrictions, it has been estimated that more than one million pangolins (of both Asian and African species) have been poached and illegally traded globally over the past decade to satisfy demand from consumers in Asia, particularly in China. This makes it the most heavily traded wildlife product in the world -- well ahead of elephant ivory and rhino horn.

Recent surveys show that TCM wholesale markets, TCM retail shops and online platforms were openly, but illegally, offering pangolin scales



PHOTO BY: RHINO FUND UGANDA

in China. Online, scales for medicinal use and carved scales/nails, or scales to be carved, were being offered while small amounts of pangolin meat and live pangolins were also available.

Prices online for scales were between \$277-677 per kg, lower than prices at physical TCM wholesale markets by between \$74-107/ kg, while TCM retail shops only offered processed scales for sale, with an average price of between \$681-1287 per kg. Pangolin meat was fetching around \$180 per kg

Between 2007 and 2016, there were 209 pangolin seizures in China: 2,405 live pangolins, 11,419 dead pangolins and 34,946 kg of scales. This probably only shows a fraction of the illegal trade in wild pangolins as many more illegal trades would have gone on uncovered by the authorities.

The four African species of pangolin -- cape or Temminck's ground pangolin, white-bellied or tree pangolin, giant ground pangolin and the black-bellied or long-tailed pangolin -- are all rated on the International Union for the Conservation of Nature's (IUCN) Red List

Pangolin skin retrieved from poachers. Pangolins have large, protective keratin scales covering their skin, and they are the only known mammals with this feature.

of Endangered Species as vulnerable. At the 2016 Conference of Parties to the Convention of International Trade in Endangered Species (CITES), the African species joined the Asian species in Appendix 1, effectively banning the trade in live individuals and any body parts including the scales.

However, if the pangolin is to be saved from extinction, the Chinese (and other Asian) authorities need to remove or, at least, reduce the use of pangolin scales in TCM. Actions such as developing alternative substitutes, changing consumer behaviour to reduce demand and raising public awareness about pangolin conservation need urgent implementation.

PANGOLINS: THE EAST AFRICAN CONNECTION

There are four species of pangolin spread throughout southern, central, and east Africa. While pangolins are found in Kenya and Tanzania, they are most prominent in Uganda -- a country reported to be both a source market for pangolin products, as well as a transit route



PHOTO BY: UGANDA CONSERVATION FOUNDATION



PHOTO BY: CREDIT: WIKI COMMONS/TRAFFIC

TOP: One of the pangolins confiscated from poachers in Uganda and set free.

BELOW: Pangolins are usually used in the making of traditional Chinese Medicines.

especially for illegal pangolin products from the Democratic Republic of the Congo.

In recent years, seizures of live pangolins, scales and meat have alerted the Ugandan authorities to the need to crack down on the illegal trade. Indeed, the Uganda Wildlife Authority (UWA) delegation to the 2016 CITES conference was at the forefront of the move to upgrade African pangolins to CITES Appendix 1, banning all trade.

Assisting UWA with pangolin conservation is the Uganda Conservation Foundation (UCF). UWA, UCF and partners are developing a project which will raise awareness of pangolin poaching, undertake research into Uganda's pangolin

populations and their ranges and provide rescue and rehabilitation protocols for law enforcement agencies to follow when a live pangolin is recovered from poachers.

Two pangolins were recently confiscated from poachers caught by UWA rangers in Murchison Falls Conservation Area. The UCF team worked with UWA to release the pangolins in a safe area.

CAPTIVE BREEDING

In September 2016, a group of over 50 conservation organisations opposed a proposal entitled “Experimental Research on Captive Breeding of Pangolins in Uganda” submitted by Zhong Shu Yong for the Asia-Africa Pangolin Breeding Research Centre Limited and presented to the Uganda Wildlife Education Centre.

Many Chinese companies have previously suggested breeding pangolins in captivity for commercial purposes as a counter to illegal poaching. However, the conservation organisations gave several reasons why they considered that farming was not a solution for pangolin conservation.



A baby pangolin

PHOTO BY: TIKI HYWOOD TRUST



Experience has shown that Pangolins are hard to keep in captivity with very few surviving, and then only for a few years, owing to the poor acceptance of captive diets, digestive problems, stress and inappropriate housing conditions. If they did survive there would be little chance of the pangolins breeding. There have been very few pangolin births in zoos or breeding centres.

A limited number of pangolins have been born in captivity to mothers that were already pregnant when they came into care, but often the offspring and/or sometimes even the mothers did not survive. If the plan was to include re-populating depleted populations, there is no historical record of success for captive bred pangolin reintroduction programmes.

Pangolins are both slow breeding and slow growing species and would therefore be very expensive to rear, meaning attempts at farming may well not be profitable. Then it would be impossible to accurately distinguish wild pangolins from farmed pangolins creating problems for law enforcement agencies trying to crack down on the illegal pangolin trade in Uganda and internationally. Poaching might also continue if, as has been suggested, wild caught pangolins are seen as more desirable than captive reared.

Captive breeding, even by trained conservation/breeding experts, is not one of the recommended conservation actions to help save pangolin species. Despite these objections it is understood that UWA have given their consent for the project to go ahead. ●

Pangolin: The worlds most wanted wild animal!

It weighs no more than 33 kg and feeds by burrowing for ants and termites which it grabs with a long, sticky tongue that is longer than its head and body when extended. It is nature's key pest control agent with an estimated yearly consumption of insects of a massive 70 million!

It has stout limbs with a paw with three toes and forefeet which have three long, curved claws for digging. Despite having to balance on the outer edges of their forefeet and having to tuck their foreclaws underneath to walk, it is a surprisingly fast runner and capable of swimming.

What makes the Pangolin the world's most illegally traded wildlife are the protective, overlapping scales that cover most of its body -- scales made of keratin that the pangolin uses for tunnelling underground, excavating the sides and roofs of passages by pushing up and from side to side with its tough scaled bodies. The scales also provide a good defence against predators when the pangolin rolls up in a ball to protect its scale-less underside.

1998

Year China issued the wild animal protection law which, according to its article 22, prohibiting the sale and purchase of nationally protected wild animals and their products.

2016

Year a group of over 50 conservation organisations opposed a proposal submitted by Zhong Shu Yong for the Asia-Africa Pangolin Breeding Research Centre Limited and presented to the Uganda Wildlife Education Centre.

209

Number of pangolin seizures in China between 2007 and 2016.

26,600

Average consumption in kilograms of Pangolin scales yearly during the period 2008-2015.