

Wildlife trafficking risks future pandemics and needs addressing, says new research

June 26 2023



The Chinese pangolin (*Manis pentadactyla*) Credit: Sarita Jnawali of NTNC – Central Zoo The United States, CC BY 2.0

Illegal wildlife trafficking risks triggering future global pandemics and loss of biodiversity and needs to be tackled, finds new research into the

ways in global supply chains are being hijacked by criminals, from the University of Sussex.

In a newly published paper in the *Journal of Supply Chain Management*, researchers from the University of Sussex' Business School found that traffickers often exploit legitimate supply routes to secretly and illegally move [endangered species](#) like pangolins and protected wildlife products like African elephant ivory in order to sell them.

The study, which focused on wildlife trafficking in maritime supply chains, identified weaknesses that make supply chains vulnerable to exploitation. The researchers found that the capacity of large container ships combined with poorly guarded ports, understaffed authorities, and corruption all increase the likelihood of illegal wildlife going undetected. According to a 2019 report by the World Bank, it is estimated that illegal wildlife trafficking in items such as Pangolin meat, which is prized as a delicacy in parts of China and Vietnam, accounts for up to 23 billion U.S. dollars in [global trade](#).

Martin C. Schleper, Professor of Supply Chain Management and Sustainability in the University of Sussex Business School, said, "Despite different theories about the origin of COVID-19, previous research has shown that emerging infectious diseases are largely of zoonotic origin, and more than 70% of these emanate from wildlife. The close and uncontrolled contact between people and wildlife in illegal trafficking creates opportunities for zoonotic diseases to transmit from animals to humans. Unless illegal trafficking is comprehensively tackled, we are increasing the odds of future pandemics.

"There has been insufficient global acknowledgement of situations in which supply chains are an integral part of wider societal problems.

"We need swift action from those involved in supply chains and from

governments around the world to tackle wildlife traffickers and their hijacking of supply chains. This could include a global ban on wildlife products, stricter enforcement of laws and regulations, and the development of technology to detect illegal activity."

The paper found that there is an economic disincentive for suppliers, buyers, customers, monitoring agencies and carriers to tackle the problem. Instead, for supply chain members, maintaining the status quo and continuity of the chains reduces the risk of disruption for them. It finds that [enforcement agencies](#) do not have the capacity to check and companies have no fear of repercussions if any illegal wildlife is detected in their supply chains, resulting in a lack of willingness to engage with the problem, which can facilitate the flow of illegal products.

The researchers say much more needs to be done to tackle the threat and to clamp down on traffickers. The paper makes various recommendations that could be introduced without destabilizing legitimate [global supply chains](#). These include: explicitly excluding the transport of wildlife and products; the enforcement of legislation, such as the removal of legal loopholes to protect certain species; and ineffective enforcement.

The researchers also recommend technological ways to aid detection of illegal products, such as adding "bio footprints" or DNA databases to scanning schemes or using [big data analytics](#) and data mining to help identify smuggling attempts.

The researchers also claim that the public need to be better informed about the impact and the risks associated with illegal [wildlife](#) trafficking through social marketing and behavioral change campaigns, which could in turn help to address and decrease criminals' profitability from these illegal activities.

More information: Sina Duensing et al, Wildlife trafficking as a societal supply chain risk: Removing the parasite without damaging the host?, *Journal of Supply Chain Management* (2023). [DOI: 10.1111/jscm.12297](https://doi.org/10.1111/jscm.12297)

Provided by University of Sussex

Citation: Wildlife trafficking risks future pandemics and needs addressing, says new research (2023, June 26) retrieved 29 April 2024 from <https://phys.org/news/2023-06-wildlife-trafficking-future-pandemics.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.