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Museum Koenig Bonn

## **New Study: Conservation Experts Warn of Current Dangers Posed by the Legal Wildlife Trade**

A multinational and interdisciplinary team of scientists has published new research that provides critical insights into the damage that the legal wildlife trade currently poses to global conservation and sustainability efforts. The group includes members of multiple International Union for Conservation of Nature (IUCN) Species Survival Commission specialist groups who aim to highlight the risk posed by legal but unsustainable trade in thousands of species.

The study, published this month in the [Journal of Environmental Management](#), involves a systematic review of existing tools, safeguards, and legal frameworks currently in place to ensure the sustainable use of live wild animals and their body parts. The researchers found that, for the vast majority of cases, the legal trade in wild animal species is not supported by any rigorous evidence of sustainability, with a lack of data on wildlife export volumes, wild animal population data, and evidence-based impact assessments of trade being of particular concern.

Dr Alice Hughes, Lead scientist, and Associate Professor at the University of Hong Kong sums up the study in her words: “Exploitation of wildlife represents one of the greatest threats to species survival. However, too often legal trade is automatically equated as being sustainable despite a lack of evidence needed to confirm that this is indeed the case. Our research sheds stark light on the systemic lack of regulatory safeguards that are urgently required to ensure that the legal trade does not drive wild population declines. Whilst many wildlife focused conventions include claims of “sustainable use” in reality these rarely refer to evidence or use precautionary principles to prevent further overexploitation of species”.

While much attention is being paid to combating illegal wildlife trade, many of the same challenges are also evident in the legal wildlife trade. The global legal wildlife trade is a big and burgeoning business estimated by some to be currently worth around 400 billion USD per year. The risks of unsustainable legal trade have been recognised and built upon by various United Nations conventions, which aim to reduce global biodiversity loss. However, the exploitation of wildlife is still considered to be the second greatest threat to global diversity and its vital contributions to people, right after climate change.

Dr Mark Auliya of the Leibniz Institute for the Analysis of Biodiversity Change in Bonn, Germany and contributing scientist, summed up the compiled results: “Our study provides evidence for 183 species showing unsustainable trade in a broad array of wildlife groups – ranging from mammals like the mountain reedbeek for trophy hunting and handicraft products to invertebrates like the harlequin shrimp for the global exotic pet trade. We found that the current legal trade was not supported by rigorous evidence of sustainability of these species examples with a lack of data on export levels and wild population monitoring data preventing any true assessments of sustainable use. These examples are only an indicative subset and should be considered as the tip of a larger iceberg. We expect that further scrutiny will reveal that far many more wildlife species are being exploited at unsustainable levels”.

The authors caution against the assumption that wildlife species can withstand high offtakes in the absence of data and underscores the need for appropriate application of the precautionary principle to prevent population declines and species extinctions, as well as to enable long-term economically viable wildlife trade. These species

are crucial for ecosystem health. For the above reasons, monitoring of populations is essential to enable sustainable trade and not to jeopardise the provision of important ecosystem services.

Dr Vincent Nijman – contributing scientist, and professor in anthropology at Oxford Brookes University in the UK interprets the results as follows: “Understanding what wild animals are being traded, where from, and at what volumes, in addition to the impact on the long-term viability of species, will be critical to slowing the loss of species from across the planet. In particular, a more precautionary approach is needed to halt biodiversity declines, underpinned by a revised burden of proof. This should place the need on traders and importers to illustrate sustainability to allow trading, not conservation scientists and practitioners to reveal unsustainability, or customs officers to prove export contravenes regulations”.

To help address the current situation, the scientists identify four core areas that should be strengthened to achieve this goal: (1) rigorous data collection and analyses of populations; (2) linking trade quotas to IUCN and international accords; (3) improved databases and compliance of trade; and (4) enhanced understanding of trade bans, market forces, and species substitutions.

Professor David Edwards – contributing scientist, and Professor of Conservation Science at the University of Sheffield, UK therefore demands: “Creating awareness among decision makers of the lack of sustainability in much legal wildlife trade is urgently needed. Action is required to adapt relevant regulatory frameworks, like CITES, to ensure the continued survival of many threatened species. There are no winners from unsustainable wildlife collection and trade: without sustainable management not only will species or populations become extinct, but communities dependent upon these species will lose livelihoods”.

#### **Notes to Editors**

- Wildlife trade is a major threat to species survival, and the majority is legal.
- Legal wildlife trade often has no assessment of sustainability, and even when mandated these may not be evidenced-based and ignoring essential scientific certainties.
- Much legal wildlife trade is not sustainable and is virtually unregulated and unmonitored.
- CITES regulates a fraction of species in trade, other species remain vulnerable to legal but unsustainable trade.
- Targeted overexploitation of species listed as threatened by the IUCN Red-List can continue legally, and without overarching oversight.
- Additional and novel methodological approaches (easy to apply and verify) are needed to understand the impacts of trade on species survival.
- A more precautionary approach is recommended to prevent further loss of global biodiversity by commercial wildlife trade.

#### **The study is a result of collaboration by a multinational and interdisciplinary team of scientists with affiliations with the following research institutions / organizations:**

University of Hong Kong, China;  
Leibniz Institute for the Analysis of Biodiversity Change, Germany;  
Pro Wildlife, Germany;  
University of Florida, USA;  
Monitor Conservation Research Society, Canada;  
Oxford Brookes University, UK;  
University of Oxford, UK;  
Philippine Center for Terrestrial & Aquatic Research, Philippines;  
University of Sheffield, UK

### Source

Hughes A, Auliya M, Altherr S, Scheffers BR, Janssen J, Nijman V, Shepherd CR, D’Cruze N, Sy E, Edwards DP 2023. Determining the sustainability of legal wildlife trade. Journal of Environmental Management (<https://doi.org/10.1016/j.jenvman.2023.117987>)

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### About the LIB

The LIB is dedicated to researching biodiversity and its changes, the results of which are disseminated to the wider society in an educational manner. In order to better understand the current mass extinction of flora and fauna, researchers are looking for connections and causes of – often – man-made changes. The goal is to develop solutions for the preservation of ecosystems and species in order to maintain the basis of current life.

### About the Leibniz-Association

The Leibniz Association combines 96 independent research institutes. Their focus ranges from the natural, engineering, and environmental sciences to the humanities and the business, space, and social sciences. The Leibniz institutes focus on relevant social, economic, and ecological issues. They perform knowledge-oriented and applied research (also among the cross-disciplinary Leibniz research alliances), are or support scientific infrastructures, and offer research-based services.



Caption: Tokay geckos (*Gekko gecko*) are traded as a medicinal remedy - for example in East Java, Indonesia.  
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Caption: Triton cockatoos (*Cacatua galerita triton*) are traded as pets - also exemplified here in East Java, Indonesia.  
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Caption: Reticulated pythons (*Malayopython r. reticulatus*) are processed as a leather product, as here in western Malaysia.  
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Caption: Banded monitors (*Varanus salvator macromaculatus*) are also popular as a leather product in western Malaysia.

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Caption: Wandering whistling ducks (*Dendrocygna arcuata*) are traded for their meat on Borneo in Indonesia, for example.

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Caption: East Asian bullfrogs (*Hoplobatrachus rugulosus*), for example, can be bought at the food market in Bangkok, Thailand.

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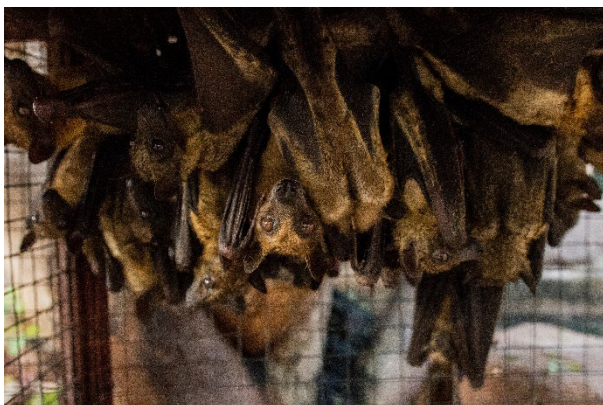
Caption: Red corals from the Mediterranean (*Corallium rubrum*) are sold as jewellery at a market in Sicily, Italy, as shown here.

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Caption: A bird market for the pet trade in southern Sumatra, Indonesia.

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Caption: Bats are exported around the world, as here from West Africa.

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