EVIDENCE TO ACTION

Research to address the illegal wildlife trade

Briefing note for policy-makers and practitioners

Oxford Martin Programme on the ILLEGAL WILDLIFE TRADE

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Tools and expertise to improve the evidence base for national and international Illegal Wildlife Trade policy already exist but are underutilised. Tapping into these resources would produce substantive benefits for wildlife conservation and associated sectors, enabling governments to better meet their obligations under the Sustainable Development Goals and international biodiversity conventions.

This can be achieved through enhanced funding support for inter-sectoral research collaborations, engaging researchers in priority setting and programme design, increasing developing country research capacity and engaging researchers and community voices in policy processes.

Key messages

- Illegal wildlife trade (IWT) is a major and widespread threat to a wide range of wildlife species, both plants and animals, which is provoking substantial public interest. It is also a governance and livelihoods issue.
- IWT is a complex, fast-changing and heterogeneous issue. Solutions need innovative thinking across natural and social sciences, arts and humanities, including incorporating local and indigenous knowledge.
- Significant uncertainty exists surrounding the scale, threat, and appropriate responses to IWT. A systematic approach is needed to address the most critical evidence gaps.
- Despite the sense of urgency, acting without a robust understanding of the issues, and an appreciation of the uncertainties, can lead to inadequate, unethical, or counterproductive outcomes for both wildlife and people.
- A greater emphasis on designing interventions in order to learn, impact evaluation, and sharing of datasets and lessons is required from all actors, including governments, funders, researchers and NGOs.
- Better aligning public policy discourse and action with research evidence would make IWT policy more effective.

Policy-makers and practitioners are generally committed to evidence-based decision-making, but this can be challenging in the face of misinformation, lobbying and inadequate information.

In this briefing note, we outline key areas where research evidence has lessons for IWT policy, highlight critical uncertainties where research is required, and emphasise the need for better design and evaluation of interventions in order to improve the effectiveness of both policy and practice in tackling IWT.

Research Evidence on the Illegal Wildlife Trade

The current IWT discourse would benefit from reframing to better align with research findings.

"Neglected" organisms threatened by IWT require more policy attention and funding.

- Illegal wildlife trade affects a wide range of species in virtually all countries. While charismatic mammals often dominate policy and funding efforts, less well-publicised groups such as fish, timber, reptiles and ornamental plants are trafficked in far greater volumes and with potentially profound ecological impacts. Newly discovered and rare species can rapidly become IWT targets.

Effective IWT interventions require a more nuanced understanding of the whole supply chain.

- IWT is not a single entity that can be addressed through a "one size fits all" solution. The trades in elephant ivory, pangolin products, dried seafood, medicinal plants and rosewood timber are only comparable at a very superficial level. Even for one species, individual products can have different supply, trade and demand characteristics, which may vary geographically (e.g., pangolin species). New species of concern and trade routes continue to emerge (e.g., cave invertebrates from the Balkans). The trade in different products can interact in complex ways, for example the use of lion bone in purported tiger bone products.

IWT is both an international and a domestic issue, including diverse actors.

- Current IWT policies often focus on Africa and Asia, potentially overlooking important UK, European and Latin American markets that act as key suppliers, consumer markets and trade hubs. Examples include eels and sturgeons for luxury foodstuffs and reptiles and birds for the exotic pet industry (Box 1).

Strong evidence links IWT to criminal activities and corruption but terrorism links are less well evidenced.

- Illegal wildlife trade is often linked to criminal behaviour and corrupt practices, ranging from small-scale individual harvesters and traders to organized international crime syndicates. The associated breakdown in governance and rule of law can exacerbate local conflict and undermine livelihoods. Actions to improve governance would therefore benefit both wildlife and people. Despite some popular narratives, the evidence of the illegal wildlife trade playing a role in funding terrorism is largely anecdotal and distracts from the main issues.

Initiatives based on communities' knowledge and perspectives, explicitly recognising trade-offs, would build greater local support for tackling IWT.

- Although enforcement is vital, particularly where armed gangs threaten both local security and wildlife, over-emphasis on militarised and enforcement-first approaches risks eroding trust between local people and conservation staff. The use of natural resources is a vital part of the livelihoods of millions of people in developing countries. It is essential to include the values, needs, rights and perspectives of these people into IWT planning and enforcement strategies so that they can be enabled to act as stewards of their resources (Box 2). Often 'alternative livelihood' projects are added onto initiatives without sufficient understanding of the local context, incentives and barriers to more sustainable livelihoods, leading to ineffective, socially unjust or counterproductive outcomes.

BOX 1

Cacti and orchids for horticulture

A neglected international and domestic issue

Collection for the horticultural trade threatens many orchid and cacti species, despite these groups combined representing almost 75% of all CITES-listed species. Research has shown that illegal trade in cacti from Latin America is widespread, and that orchids are wild-collected for trade globally, from Mexico, to Vietnam, to Thailand to Greece. These plants often move through complex domestic and international trade chains spanning legal and illegal markets to reach specialist consumers all over the world, including Europe.

More support for core needs (i.e., basic capacity, infrastructure and equipment) for tackling IWT at its source is likely to have a high return on investment.

- There is a strong focus on new technologies to tackle IWT, including forensics, drones, mobile phone apps and machine learning algorithms. Although underpinned by cutting edge research and with great potential for supporting IWT action, particularly online, at borders and transit points, new technologies alone are insufficient to address complex trade and governance issues. Traffickers rapidly adapt to avoid detection. Factors such as corruption can easily undermine these systems. Technologies do not address the basic drivers of hunting such as poverty and poor governance. The social contexts in which they are deployed can raise ethical concerns. By contrast, prioritising the motivation, wellbeing and working conditions of law enforcement officials is likely substantially to enhance their effectiveness.

Demand-influencing campaigns should go beyond awareness-raising towards stimulating realistic, nuanced and locally appropriate behaviour change.

- Influencing consumer demand for IWT products is critical and goes hand-in-hand with improved regulation and enforcement. Conservationists often aim to achieve large scale impact in short time periods, using awareness-raising approaches. More evidence-based interventions would use experience from fields like public health to instead focus campaigns on specific target groups.

IWT policies should consider the "winners" and "losers" (both people and wildlife) of their interventions.

- IWT interventions often focus on single species, without fully accounting for other downstream impacts. Yet interventions affect not only the targeted species, but also other species and ecosystems, as well as people's livelihoods and wellbeing (Box 2). The relationship between IWT and poverty is complex and dynamic, while the demand for IWT products is affected both by environmental policy and external factors. There is a need to ensure that interventions do not act as blunt instruments that undermine working examples of sustainable use or cause collateral damage to the conservation of other species or the livelihoods of vulnerable people.

BOX 2

Poverty-IWT interactions in Uganda

Research at three National Parks in Uganda found high levels of illegal resource use. Links between IWT and poverty were complex and multidirectional. A tourism levy aimed at providing compensation for the costs of living with wildlife was inequitably shared, causing resentment. The wildlife department had a very limited budget for community engagement and mistrust was high between Park staff and hunters. Willingness existed on both sides to find solutions.

Uncertainties and research opportunities for IWT policy

Research has highlighted critical gaps in understanding that are priorities to support better policy-making.

More efforts are required to document the source, trade volumes and routes of illegally traded species.

- For most species, there remain huge gaps in our ability to describe even the most basic of IWT trade chains, or to understand the impacts of IWT on wild populations. This leads to interventions based on unsubstantiated assumptions. A better understanding is needed of the role of trade in species declines, in the context of other threatening factors such as land conversion, in order that resources are appropriately prioritised. This includes better documentation and reporting of wildlife trade (legal and illegal).

Case studies to untangle complex trade dynamics would better predict the outcomes of policy interventions.

- Little is known about the factors affecting IWT, how they interact and, crucially, how they shift with policy interventions, technological changes and external drivers. For example, there is little understanding of how banning wildlife products (e.g., burning ivory stockpiles) or introducing new products into a market (e.g., synthetic horn) affects prices and consumer behaviour. IWT policy must be grounded in a systemic understanding of the nature of supply factors, market structure and consumer demand (Box 3).

Effective demand-influencing requires research into the factors underlying the use of IWT products.

- Consumer demand interventions require a much better understanding of the complex factors that motivate people's decisions to buy IWT products, such as perceived health benefits, cultural status or understanding of the provenance and legal status of a product. The influences of income levels, prices, and the availability of acceptable substitutes are also under-researched. Without this understanding, interventions to change demand cannot be effectively designed.

Improved research and collaboration are needed to understand online IWT and intervene effectively.

- E-commerce and social media platforms provide a widely accessible communication tool for IWT networks, opening up new markets, and reaching an unprecedented number of IWT users. Evolving financial technologies, such as online and mobile payment platforms, provide new mechanisms to enable IWT transactions to take place. Addressing these requires new collaborations with actors in technology and finance, supported by appropriate research.

The need for more evidence-based IWT interventions

A lack of evidence-based design and evaluation of IWT interventions risks ineffective or harmful outcomes, and limits knowledge exchange opportunities.

Investment in IWT interventions should be guided by a clear theory of change, underpinned by an understanding of the likely impacts on both wildlife and people.

- Whether it aims to promote behaviour change among consumers, or captive-breed threatened species, no single intervention is likely to be adequate in isolation. Each approach has its respective strengths and challenges, and is suitable to addressing IWT in different markets, species groups or points in the trade chain. Careful design, with an explicit theory of change, is essential to ensure that the chosen set of interventions is appropriate, and that the underlying assumptions hold (Box 3).

Funders should require appropriate plans for monitoring and evaluation of interventions, robust ethics processes, and sharing of data and lessons learnt.

- Impact evaluation methods are well established in international development and public health. Approaches such as before-after-control-intervention designs and process-tracing could be much more widely used for IWT. Platforms for sharing of methods, datasets and lessons learnt (e.g., Wildlife Consumer Behaviour Change Toolkit[1]) would add significantly to the evidence-base and enhance intervention effectiveness. More robust and holistic ethics procedures, following best practice and regularly re-evaluated, will minimise the potential for unintended impacts on vulnerable people and wildlife.

BOX 3

Design and evaluation of demand-influencing IWT interventions - rhino horn in Vietnam

Ten interventions to reduce demand for rhino horn in Vietnam were assessed against a behaviour change framework. Only one had measurable objectives and collected outcome indicators which would enable attribution of impact. Less than a third had a theory of change, used research evidence to formulate messages or evaluated outcomes. Indicators were based mostly on activities rather than outcomes. Grounding the design and evaluation of such campaigns in best practice from behaviour change research would both improve outcomes and enhance learning for future interventions.

Funders should support research that involves people from IWT-affected countries and integrates local knowledge.

- Sustainable solutions to IWT require all IWT-affected actors to have sufficient capacity and a strong knowledge base. International collaborations that build a strong research base in IWT-affected countries (particularly low-income countries as prioritised by the UK government's Global Challenges Research Fund[2]), integrate local and indigenous knowledge, and support early-career researchers are critical. Failure to integrate these actors' perspectives risks undermining the sustainability and local acceptability of IWT initiatives.

[1] www.changewildlifeconsumers.org
[2] www.ukri.org/research/global-challenges-research-fund

Where can I get more information?

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Further references[3]

Citation

Milner-Gulland, E.J., Cugnière, L., Hinsley, A., Phelps, J., 't Sas-Rolfes, M., Verissimo, D. (2018) Evidence to Action: Research to address the illegal wildlife trade. Briefing note to policy-makers and practitioners. doi: 10.31235/osf.io/35ndz

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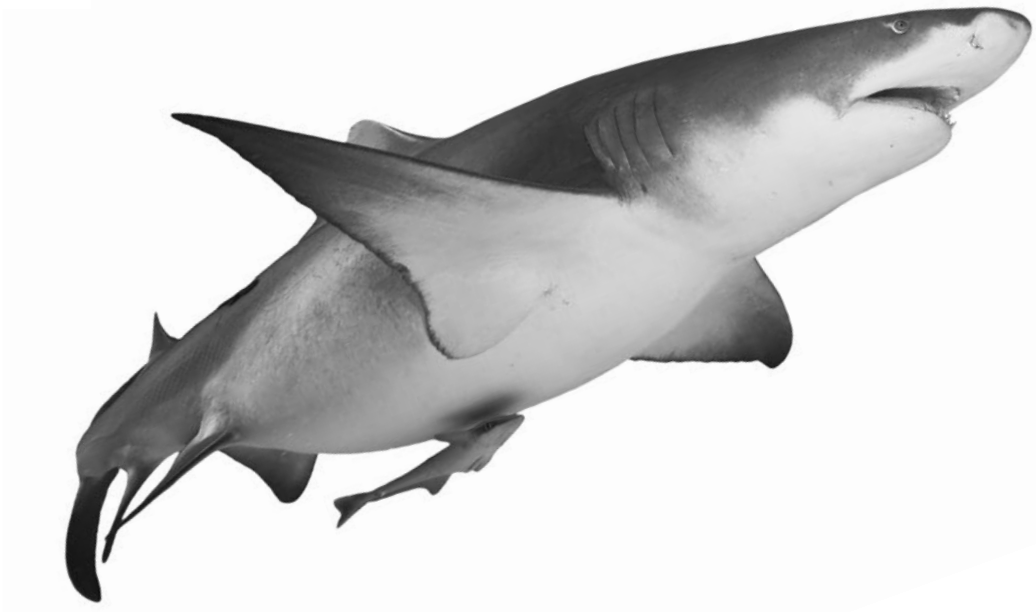

This briefing is part of the 2018 Evidence to Action: Research to Address Illegal Wildlife Trade[4] event programme, organised by five of the UK's most active IWT research institutions, to support the London 2018 IWT Conference[5].

[3] Some issues discussed in this briefing note were identified through a global horizon scanning exercise led by the Oxford Martin Programme on the Illegal Wildlife Trade, with ideas from an interdisciplinary pool of over 130 experts. www.illegalwildlifetrade.net/2018/03/19/illegal-wildlife-trade-horizon-scan/

[4] www.illegalwildlifetrade.net/iwt18event

[5] www.gov.uk/government/topical-events/london-conference-on-the-illegal-wildlife-trade-2018