

EDITORIAL

Wildlife Trade in 2021: Still start with the consumer

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The trade in and consumption of wildlife is indisputably a threat to both human health and global biodiversity (Can *et al.*, 2019 and 't Sas-Rolfes *et al.*, 2019). Consumer-focused demand reduction is one proposed family of strategies designed to mitigate trade and consumption through the application of robust wildlife consumer research, which is then used to design behavior change initiatives that (ideally) reduce consumer demand (e.g. Veríssimo, 't Sas-Rolfes, and Glikman, 2020). In 2012, Veríssimo *et al.* published a foundational editorial within this journal that was one of the first articles to explicitly call for consumer-focused demand reduction measures. Veríssimo *et al.* (2012) noted such positives as overcoming persistent failures in enforcement (e.g. Rasphone *et al.*, 2019), and promoting greater inclusivity by bringing diverse stakeholders, such as indigenous peoples, into these efforts. Since that article, consumer-focused demand reduction has received growing attention and broader application (e.g. Davis *et al.*, 2020, Veríssimo *et al.*, 2020). Although it has been heartening to see an increase in robust, applied consumer research to reduce demand, the COVID-19 pandemic—which almost certainly originated due to wildlife trade and consumption (Roe *et al.*, 2020)—underscores that there is still a long way to go, and meaningful, multipronged and collaborative steps must still be taken to address this threat to human health and global biodiversity (the “OneHealth” concept (El Zowalaty and Järhult, 2020). Measures that must be implemented include more well-defined laws in emerging infectious disease (EID) hotspots (Huang *et al.*, 2020) and decentralized disease surveillance at known source sites, such as wet markets (Watsa *et al.*, 2020). However, consumer-focused demand reduction efforts are arguably more powerful due to the nature of the wildlife trade chain. As the chain is marked by multiple entry-points for disease, from the initial poaching event to the final consumption of an infected animal (Watsa *et al.*, 2020), removing the end point of consumption through demand reduction causes the entire chain to collapse, consequently removing those multiple EID points.

Although reducing consumer demand has been recognized as an important strategy for nearly ten years (if not more, e.g. Salazar *et al.* (2018)), consumer-focused demand reduction strategies continue to be largely absent from wildlife-trade centered COVID-19 reflections (e.g. Borzeć *et al.*, 2020, Lindsey *et al.*, 2020, Petrikova *et al.*, 2020 and Roe and Lee, 2021). In light of the crippled world economy resulting from the COVID-19 pandemic (Financial Times, 2021) and imperative need to swiftly counteract the next pandemic (Evans *et al.*, 2020), consumer-focused demand reduction efforts should be at

the forefront of these conversations about wildlife trade and consumption. Such efforts are often cheaper than comparative enforcement programs (Holden *et al.*, 2019), with longer-lasting effects and proven impact (e.g. Thomas-Walters *et al.*, 2020 and Salazar *et al.*, 2018). Furthermore, efforts that focus on consumers inherently overcome challenges presented by the complex, interlinked system of illegal and legal wildlife trade, which can frustrate more well-known efforts such as regulations imposed by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (Veríssimo, 2012).

In 2012, Veríssimo *et al.* (2012) urged to “start with the consumer” and that we must “[put] human behaviour at the heart of our [conservation] strategies”. In 2021, we still must start with the consumer, and those messages may be even more resonant now. The COVID-19 pandemic has impacted a large proportion of the global population and has similarly raised awareness of the role that harmful human behaviors, including illegal and poorly managed wildlife farming and wildlife consumption (Huang *et al.*, 2020), has played. Although COVID-19 has shown the value in understanding human behavior and addressing consumer demand in Asia, the next pandemic could easily arise anywhere else in the world. Understanding and addressing wildlife consumer behavior is therefore a global concern, which must be made a priority by governments and non-governmental organizations across the world.

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