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## Online trade in wildlife and the lack of response to COVID-19

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### Abstract

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Wildlife trade has been widely discussed as a likely origin of the COVID-19 pandemic. It remains unclear how the main actors in the wildlife trade chain responded to these discussions and to the campaigns advocating wildlife trade bans. We analyzed the content of ~20,000 posts on 41 Facebook groups devoted to wild pet trade and ran a breakpoint and a content analysis to assess when and how the COVID-19 pandemic was incorporated into the discourse within trade communities. Only 0.44% of advertisements mentioned COVID-19, mostly after WHO declared COVID-19 a pandemic. No traders discussed the role of trade in spreading diseases; instead, posts stimulated the trade in wild species during lockdown. COVID-19 potentially offers persuasive arguments for reducing wildlife trade and consumption. This effect was not demonstrated by on-the-ground actors involved in this market. Bans in wildlife trade will not be sufficient and additional strategies are clearly needed.

**Keywords:** Behavior change, COVID-19, Online trade, Pet trade, Wildlife trade ban

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### 1. Introduction

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Dr. Zhong Nanshan, attesting a suspicion that SARSCoV-2 had spread from wild animals in a Wuhan market; no comments were prompted by this post. This lack of response is shared by two culturally different countries assessed, one geographically close to the first COVID-19 epicenter and the second far away. Surprisingly, some of the posts and comments encouraged trade in wild animals during the pandemic, affirming that wild animals would provide good companionship during the quarantine period and promoting temporarily reduced prices to stimulate purchases before lockdown.

It is important to recognize that the degree to which people can fully comprehend a risk is based on their own lived experiences. It is possible that if the majority of the traders and consumers have not experienced a known event of direct contamination from contact with animals, they may not perceive a risk. Spillover of pathogens through a pet trade chain was unequivocally confirmed in the past, as in 2003, when a large shipment intended to supply the pet market entered in the USA containing some African rodents infected by Monkeypox virus ([Reed et al., 2004](#)). Those infected individuals were housed in close proximity to other animals at pet shop facilities, and infected prairie dogs (*Cynomys* spp.), a North American rodent ([Guarner et al., 2004](#); [Reed et al., 2004](#)). Several people from six different states became ill exclusively after having contact with infected prairie dogs purchased as pets, and ever since the importation of African rodents is banned in the country ([CDC, 2018](#)). In addition, consumer demand for rodent species in the USA changed considerably after this event ([Lankau et al., 2017](#)). A different situation is described for Ebola, in which the natural reservoir of Ebola virus still remains unknown. Close contact with wildlife during Ebola outbreaks has been discussed as a factor of risk after some primary human infections of 2001–2003 Ebola outbreaks were traced back to butchering or contact with infected carcasses of dead gorillas, chimpanzees and duikers in the wild ([Leroy et al., 2004](#)). After the Ebola outbreak in 2018 in the Democratic Republic of the Congo, local wild meat vendors did not consider themselves at occupational risk for infection ([Lucas et al., 2020](#)). Yet, local populations interviewed during the Ebola outbreak in West Africa recognized wild meat consumption as associated with the risk of Ebola infection. However, they did not support the decision of banning wild meat consumption because they believed the ban occurred for political reasons instead of human health concerns ([Mufunda et al., 2016](#)).

We believe a similar perception may be occurring in the case of COVID-19 and its relationship with wildlife trade. The most common way to be infected by the SARS-CoV2 is by human-to-human contact. This causality can lead to misconceptions. For example, it has been reported that Dayak hunters in Indonesian Borneo associate COVID-19 with modern life and technology due to their perception that the disease travels by plane and impacts urban areas as opposed to the isolated forests in which they live ([Thung, 2020](#)). Similarly, [Shepherd et al. \(2020\)](#) found from analysis of both in person interviews and online discussions that Indonesian bird traders were not convinced that Avian influenza existed. They reported that there were instead numerous theories about existence and spread of the virus, including a belief that songbird competitors from other countries had concocted it as a