High Impact Publication Selected for Special Recognition in 2020

Unit: Wildlife Ecology and Conservation **PDF Download(s):** Publication

Publication Full Citation: Scheffers, B.R., B. F. Oliveira, I. Lamb, and D. P. Edwards. 2019. Global Wildlife trade across the Tree of Life. Science, 366(6461), 71-76

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Publication Impact: Trade in wildlife, and their parts, is a multibillion dollar industry that is driving species toward extinction. It is well recognized for a few key species, such as elephants and rhinos, but it occurs globally, across a wide array of species. Dr. Brett Scheffers, the lead author, and his team shows that of >31,500 terrestrial bird, mammal, amphibian, and squamate reptile species assessed in this study, ~18% (N = 5579) are traded globally. Trade is strongly phylogenetically conserved—concentrated in certain phylogenetic groups—thus the potential for long-term impact on certain lineages is substantial. The hotspots of this trade are concentrated in the biologically diverse tropics. Using different assessment approaches, Scheffers et al. predict that, owing to their phylogenetic replacement and trait similarity to currently traded species, future trade will affect up to 3196 additional species—totaling 8775 species at risk of extinction from trade. This analysis allows for prediction of trade potential where it does not yet occur and underscores the need for a strategic plan to combat trade with policies that are proactive rather than reactive. Such framework is important because species can quickly transition from being safe to being endangered as humans continue to harvest and trade across the tree of life. In the first month of publication, this research article was viewed 23,000 times on the journal Science's website and downloaded 5000 times. This article received widespread coverage in over 50 news stories and several hundred tweets and blog posts. According to Altmetric, an assessor of online activity and communication surrounding scholarly content, its score of 760 places it in the top 5% of all multi-disciplinary research articles scored by Altmetric (spanning millions of articles).