Dear Editors,

Please find enclosed our manuscript entitled, “*Measuring the effects of road proximity on the distribution of commercially valuable bird species in an Indonesian protected area*” for your consideration as an original article in *Biotropica*. The wildlife trade threatens nearly 7,000 species globally and is facilitated by the roads that accompany deforestation. As forest cover shrinks across the tropics, commercially valuable wild species (typically large, charismatic, and forest-dependent) are doubly threatened by habitat loss and hunting or trapping, both of which increase in intensity with proximity to roads. In Indonesia, a thriving domestic trade in wild birds complements the international trade in pets (e.g. slow loris) and wildlife parts (e.g. pangolin scales), but the extent to which this domestic trade affects wildlife populations far from main markets is unknown. If trapping reduces habitat availability even in remote locations, commercially valuable bird species may be far more threatened than previously known.

Here, we collected a novel dataset of 115 bird point counts, sampled five times each, in primary forest in a remote protected area in Indonesian Borneo. We used a community occupancy model, corrected for detection, to compare the effects of nearness to roads and forest cover on the distributions of commercially valuable and non-valuable bird species. Our findings represent key advances in conservation science in the following ways:

1. We found that the habitat available to commercially valuable bird species is measurably reduced by the increased access to forest provided by roads, even in our remote study location in Indonesian Borneo. Deforestation is rapidly reducing available habitat in Borneo for these same species, so they are doubly imperiled. Reducing how far into the forest trappers are willing to search may compensate for some of this habitat loss.
2. We did not detect any individuals of straw-headed bulbul (*Pycnonotus zeylanicus*) during our sampling. This species is the most valuable Indonesian songbird and is considered Critically Endangered by the IUCN. Therefore, trapping efforts likely stretched much deeper into the protected area in the past, and could again in the future if the commercially valuable species that we detected increase further in value. Furthermore, if they are subject to an anthropogenic Allee effect (in which rarity increases their market value, which in turn motivates increased effort to capture them, and further increases in price), market value increases are likely as these species become rare.
3. We showed that non-invasive point counts, coupled with publicly available road maps and remotely sensed forest cover data, may be used to measure the impact of trapping on primary forest birds where roads are an appropriate measure of access. Furthermore, our findings suggest that access (i.e. proximity to roads) may be an important component of habitat suitability for commercially valuable species. Accounting for access may reduce overestimation of habitat availability when planning conservation strategies for species threatened by trade.

Together, we believe that these contributions fit within the purview of *Biotropica*. Thank you for your time and consideration. We look forward to your response.

Sincerely,

Katherine S. Lauck, PhD candidate

Wildlife, Fish and Conservation Biology, University of California at Davis

1071 Academic Surge, One Shields Avenue

Davis, CA 95616-8627

(540) 923-0228; kslauck@ucdavis.edu