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**Benjamin Howes**

PhD Student

24th January 2024

Dear Dr. Jonathan Davies,

Thank you for allowing us to respond to reviewer comments and to resubmit our manuscript, now entitled “*A global latitudinal gradient in the proportion of terrestrial vertebrate forest species*” as an article in *Global Ecology and Biogeography*.

As you can see from the attached reviewer comments document we have responded to each individual reviewer comment, and in most cases stated where and how we have amended the manuscript to rectify the concern. We feel the comments the reviewers made have substantially improved the manuscript, and would like to thank them for their input. Changes of particular note include: a new method used to analyse the proportion of forest species, which allowed us to control for spatial autocorrelation whilst still using a single model; inclusion of two additional hypotheses as suggested by reviewers and yourself (altitude and species richness); and a complete rewrite of the first two paragraphs of the introduction to contextualise our study, and highlight why studying the proportion of forest species is important.

We would additionally like to thank you for your comments and suggestions on the manuscript. Based on these we have created a figure which shows the relationship between the proportion of forest species and species richness, as well as a figure showing how the proportion of forest species varies with latitude (Figure 2). Whilst we did not run comparison models using total species richness and compare these to the proportion of forest species as you suggested, we think the inclusion of total species richness in our models is perhaps even more interesting and fulfills the same purpose; it ensures effects seen from other factors are independent of total species richness, and tests another interesting hypothesis (niche packing).

All co-authors have seen and approved the manuscript, and we declare we have no competing interests.

Yours sincerely,

Benjamin Howes, Manuela González-Suárez, Cristina Banks-Leite, Flavia Belotto-Trigo, and Matthew Betts