

# proposal.Rmd

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## **Where the gaps are? Analysing Vertnet database to find the global gaps in avian specimen collections.**

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Museum and Natural history collections are important, essential and invaluable source of earth history's biodiversity information. The specimens in natural history collections serve as the basis for numerous fields of basic science and research. Natural history collections also contain deep, taxon-specific information derived from global populations of plants, animals, fungi, and microorganisms. (Hope, Sandercock, and Malaney 2018; Johnson et al. 2011; Card et al. 2021)

Some background Use of specimens - maybe Edwards paper Kevin Winker paper Some background about Vertnet Disparity between global south collection perhaps Usefulness of the analysis

Card, Daren C, Beth Shapiro, Gonzalo Giribet, Craig Moritz, and Scott V Edwards. 2021. "Museum Genomics." *Annual Review of Genetics* 55: 633–59.

Hope, Andrew G, Brett K Sandercock, and Jason L Malaney. 2018. "Collection of Scientific Specimens: Benefits for Biodiversity Sciences and Limited Impacts on Communities of Small Mammals." *BioScience* 68 (1): 35–42.

Johnson, Kenneth G, Stephen J Brooks, Phillip B Fenberg, Adrian G Glover, Karen E James, Adrian M Lister, Ellinor Michel, et al. 2011. "Climate Change and Biosphere Response: Unlocking the Collections Vault." *BioScience* 61 (2): 147–53.