



Yes! Paved roads may attract more scavenging animals, but at dire cost to pristine nature.

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In Norway, the construction of terrestrial wind farms necessitates the development of roads for their construction and maintenance. We have assessed the varying effects of these roads on animal populations.

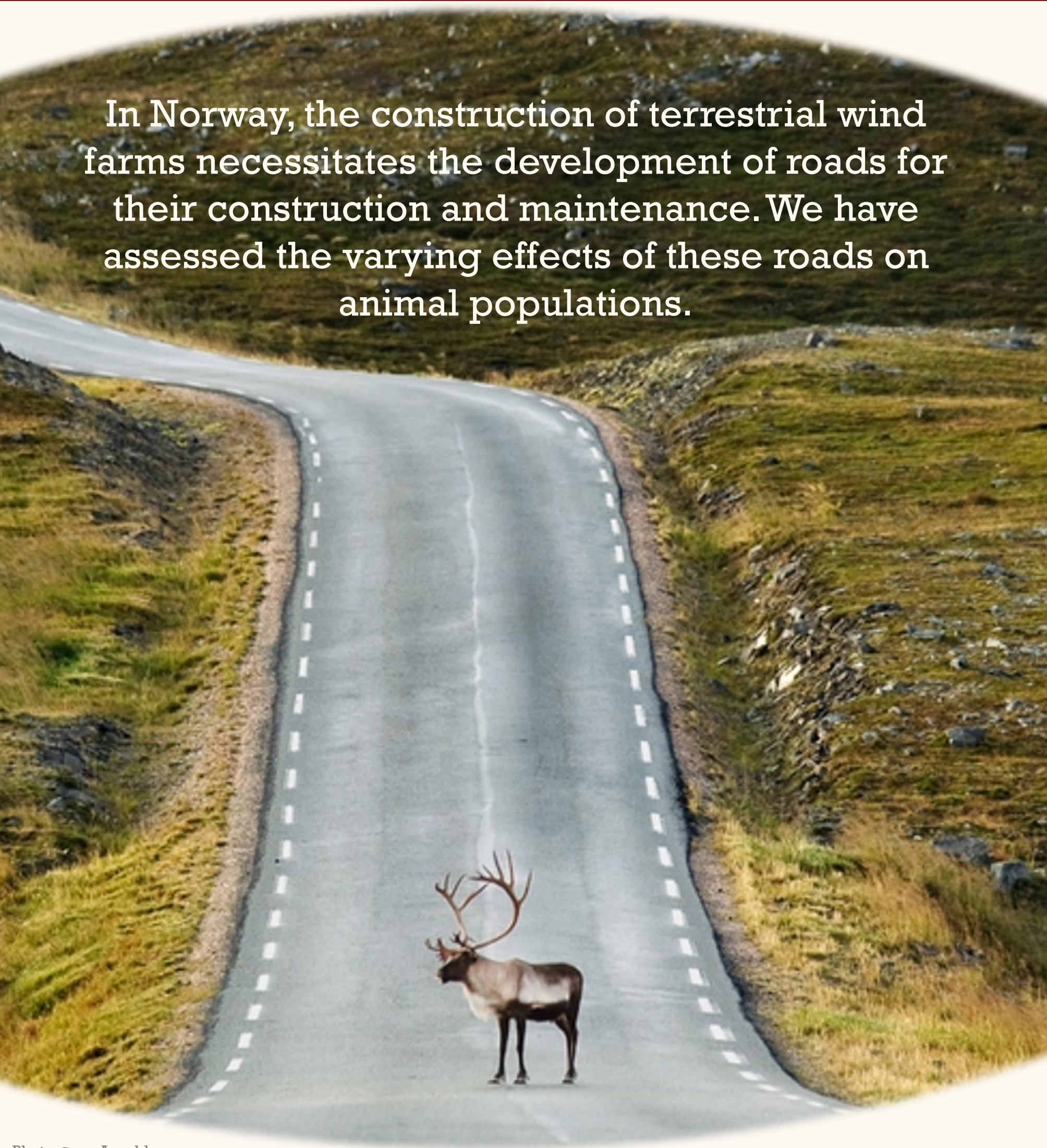


Photo: Corey Arnold

Materials and methods

- ❖ De Jonge et al.'s 50-year meta-study on linear infrastructures and animal abundance served as source of data.
- ❖ We filtered the database for paved and unpaved road-types, as well as for birds and mammals.
- ❖ Statistical analysis was carried out using a two way ANOVA using RStudio version 2023.06.1.



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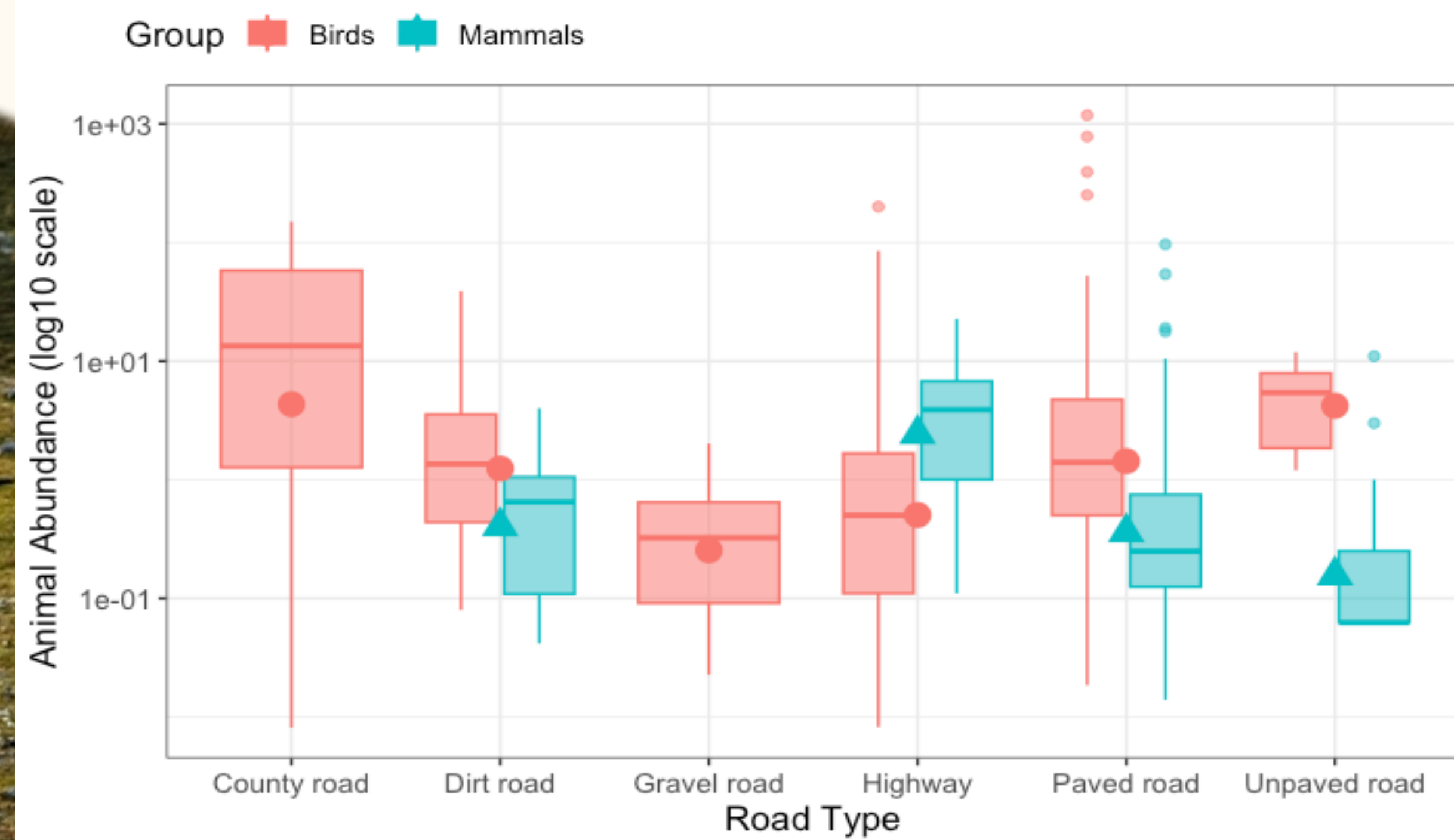


Figure 1: Boxplot for both animal groups and all road-categories included in analysis. Large circles and triangles mark the mean log value for animal abundance of both mammals and birds.

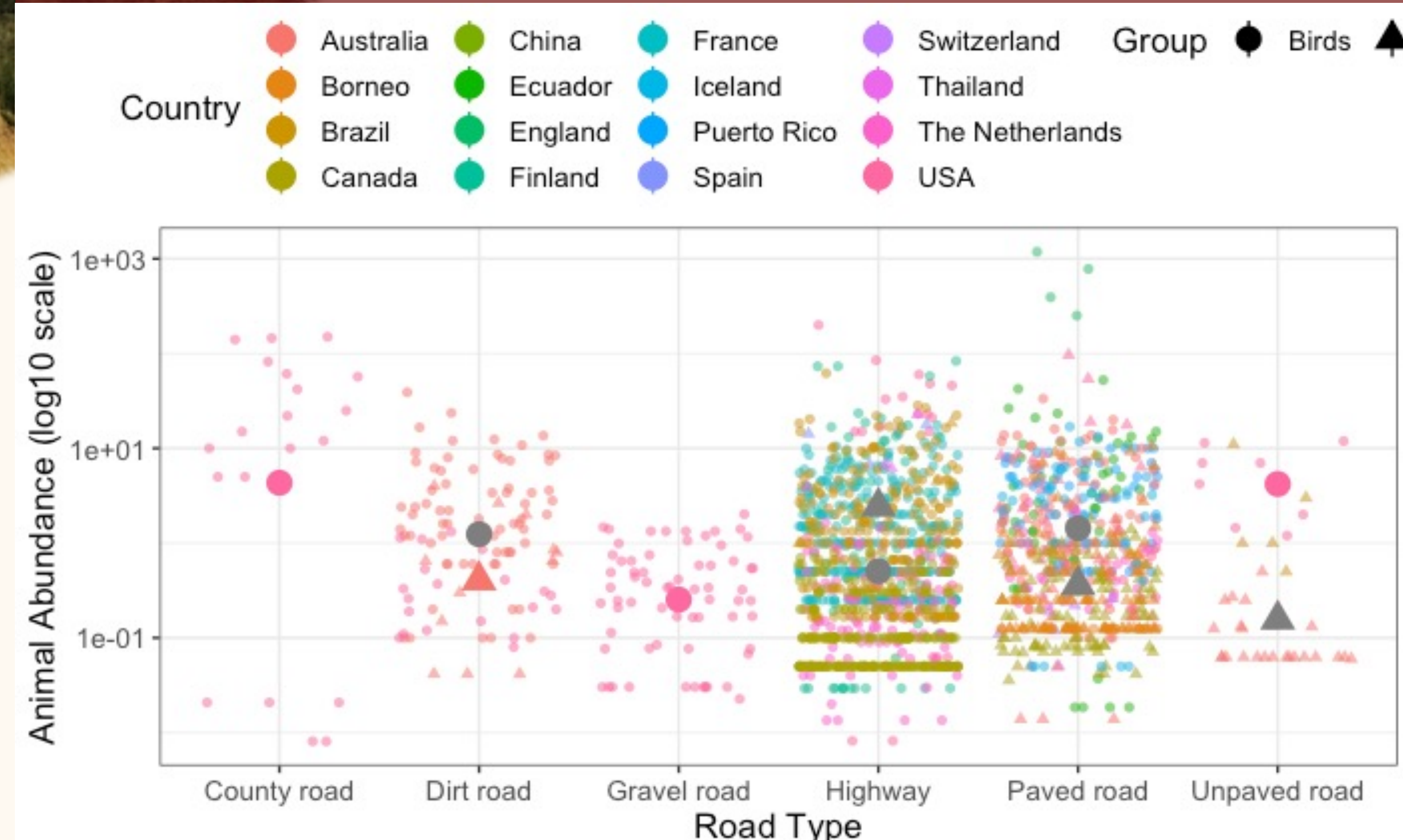


Figure 2: Figure showing animal abundance measured by categories "Group" and "Country of origin". The Large dots and triangles mark the mean value, and the colorization signalizes whether the mean value is completely dominated by sightings from a single country (in colour) or include data from multiple countries (grey).

RESULTS

- ❖ There is a significant difference in the types of roads and how they affect animal abundance
- ❖ $P < .01$
- ❖ Paved roads exhibit higher animal abundance compared to non-paved roads. This difference may be attributed to scavenger activity, habituation, and other factors.



SCAN ME
TO VIEW
CODE
USED IN
THIS
RESEARCH!

CRediT: **Robert Kaspersen Fureli:** Conceptualization, Investigation, Visualization. **Hanif Kawousi:** Conceptualization, Investigation, Visualization, Writing, Review and Editing, Software, Formal Analysis. **Morten Hoel Mikkelsen:** Conceptualization, Investigation. **Anders Moen Norheim:** Conceptualization, Investigation, Visualization.

References: de Jonge, M. M. J., Gallego-Zamorano, J., Huijbregts, M. A. J., Schipper, A. M., & Benítez-López, A. (2022). The impacts of linear infrastructure on terrestrial vertebrate populations: A trait-based approach. *Global Change Biology*, 28, 7217–7233. <https://doi.org/10.1111/gcb.16450>.



Photo: Statkraft