

Technische Universität München | TUM School of Life Sciences | Hans-Carl-von-Carlowitz Platz 2 | 85354 Freising

## Master Thesis (Forst / Ingöko / Biologie / SRM) at Professur für Ökoklimatologie

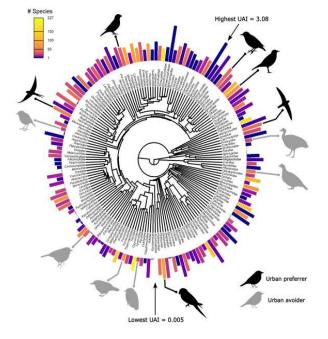
# Urban tolerance metrics for European birds using citizen science data

### What is it about?

Urbanization (transformation of natural ecosystems in human settlements) is generally considered as a significant threat to the global biodiversity. Animals may cope with increased human presence and disturbance by increasing their urban tolerance. However, there are several indices of urbanization levels, including percentage of impervious surfaces, night-time lights, land (tree) cover, distance to city centre, human density and footprint and their mutual relationship is still not very clear.

#### **Research Question**

How are different urban tolerance indices mutually intercorrelated?



#### Tasks

- Extraction of various urbanization metrics using GIS/R software for geo-referenced observations of European birds from citizen science databases
- Exploration of the mutual relationships between these metrics
- Data processing, analysis and visualization to answer the question
- Moderate to high skill in GIS/R is required

#### Starts immediately / until end-May

If you are interested, please contact:

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