



GrünesBand
Deutschland



european
greenbelt

**ReCo - Scientific Conference - Enhancing
biodiversity & interconnectivity by ecological
restoration**

Biodiversity Monitoring at the Green Belt: A Nationwide Insect Survey of Habitat Connectivity and Biodiversity

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Systematic study of the biological diversity of Germany's Green Belt for the analysis of its biotope network and climate corridor function, the development of a management and monitoring concept, and the assessment of its Outstanding Universal Value (OUV) in the course of the UNESCO World Heritage nomination.

🕒 1.10.2024 to 31.12.2027

💰 ~ 750.000 EUR



Federal Agency for
Nature Conservation

🦋 Main Goal: Survey of the flying insects in the German Green Belt

Gefördert durch:

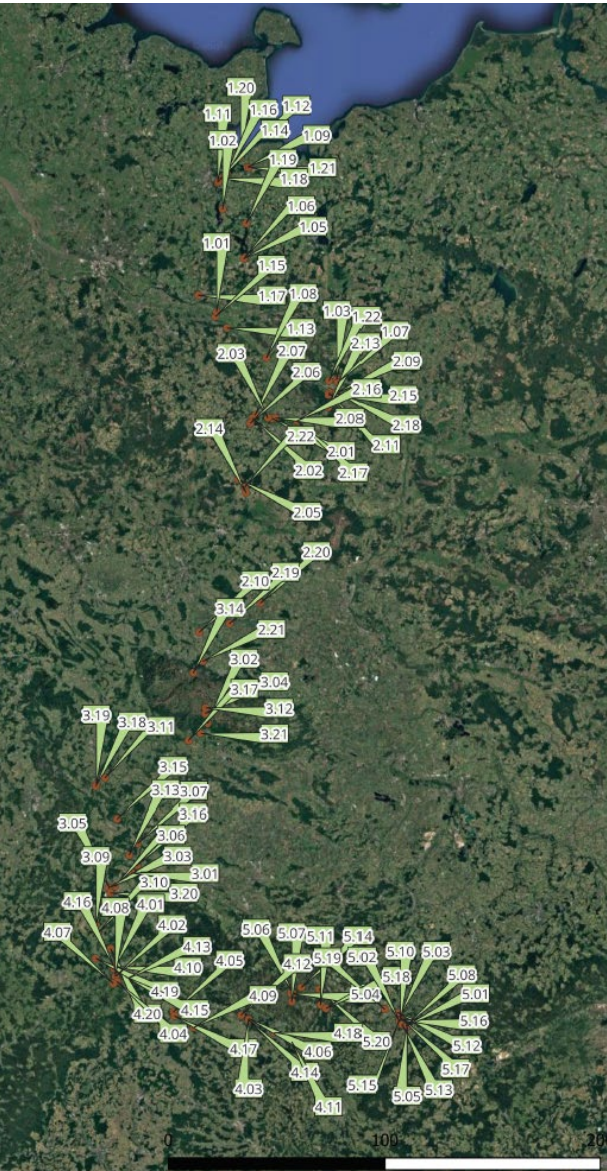


Bundesministerium
für Umwelt, Klimaschutz, Naturschutz
und nukleare Sicherheit

aufgrund eines Beschlusses
des Deutschen Bundestages

Specific Goals:

- Providing a dataset for the description of the „Outstanding Universal Value“ of the Green Belt
- First standardized method to survey the insectdiversity of the german Green Belt
- Evaluation of the Green Belt as biotope network, climate corridor and habitat
- Survey of insects with Malaise traps:
 - 100 Traps on 19 different biotope-types and 5 special habitats
 - Monthly sampling from april to august 2025
 - DNA-Metabarcoding analysis + additional taxonomic plausibility checks
- Complementation through data collection of exisiting biodiversity monitorings





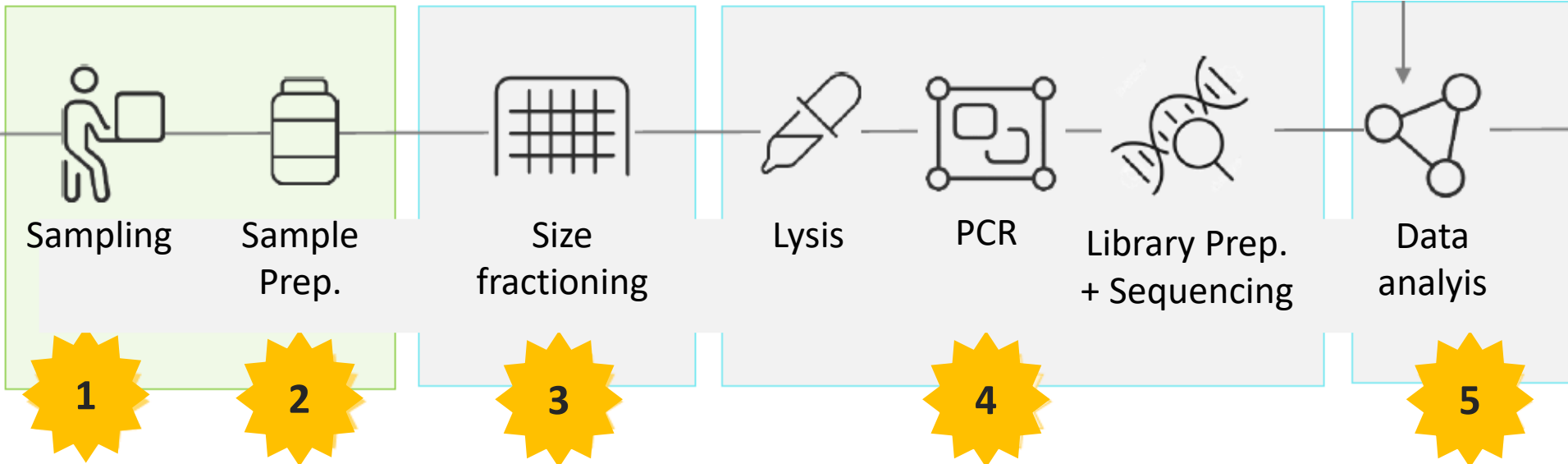
Credit: J. Schmidl

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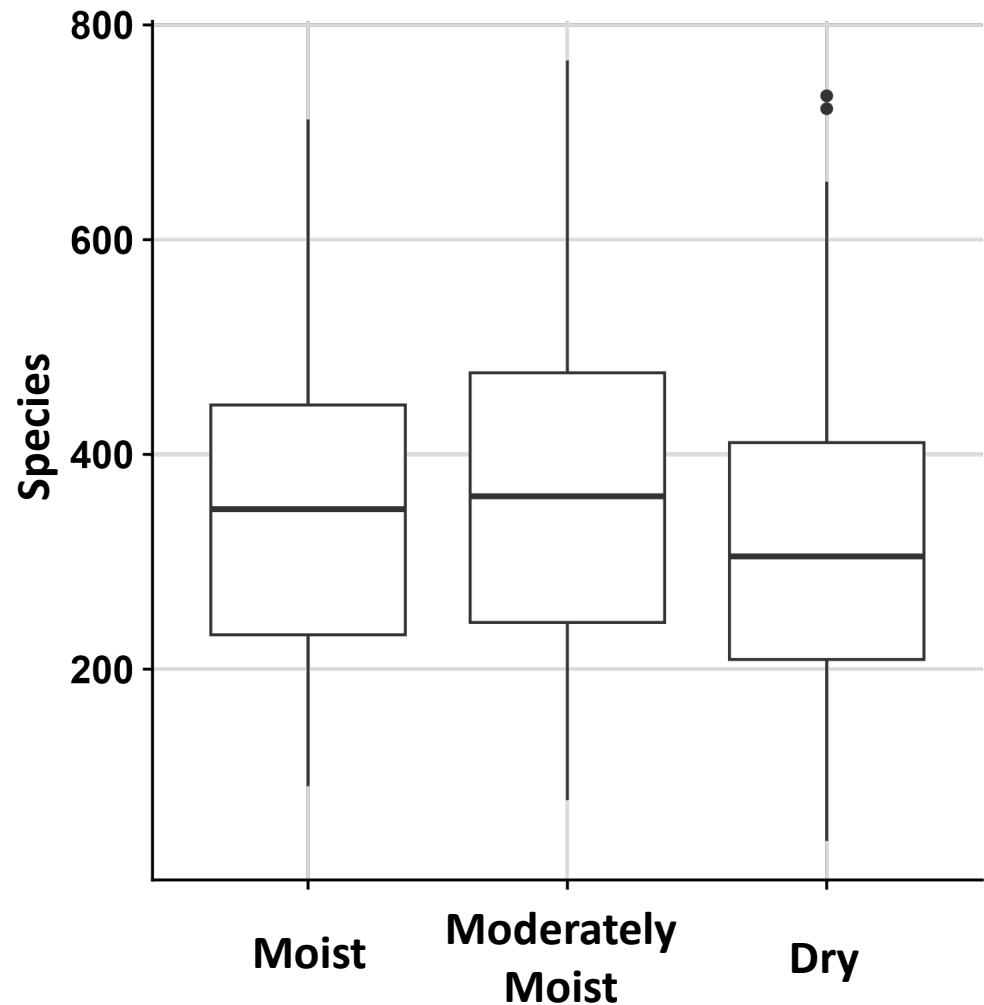


What is being evaluated?

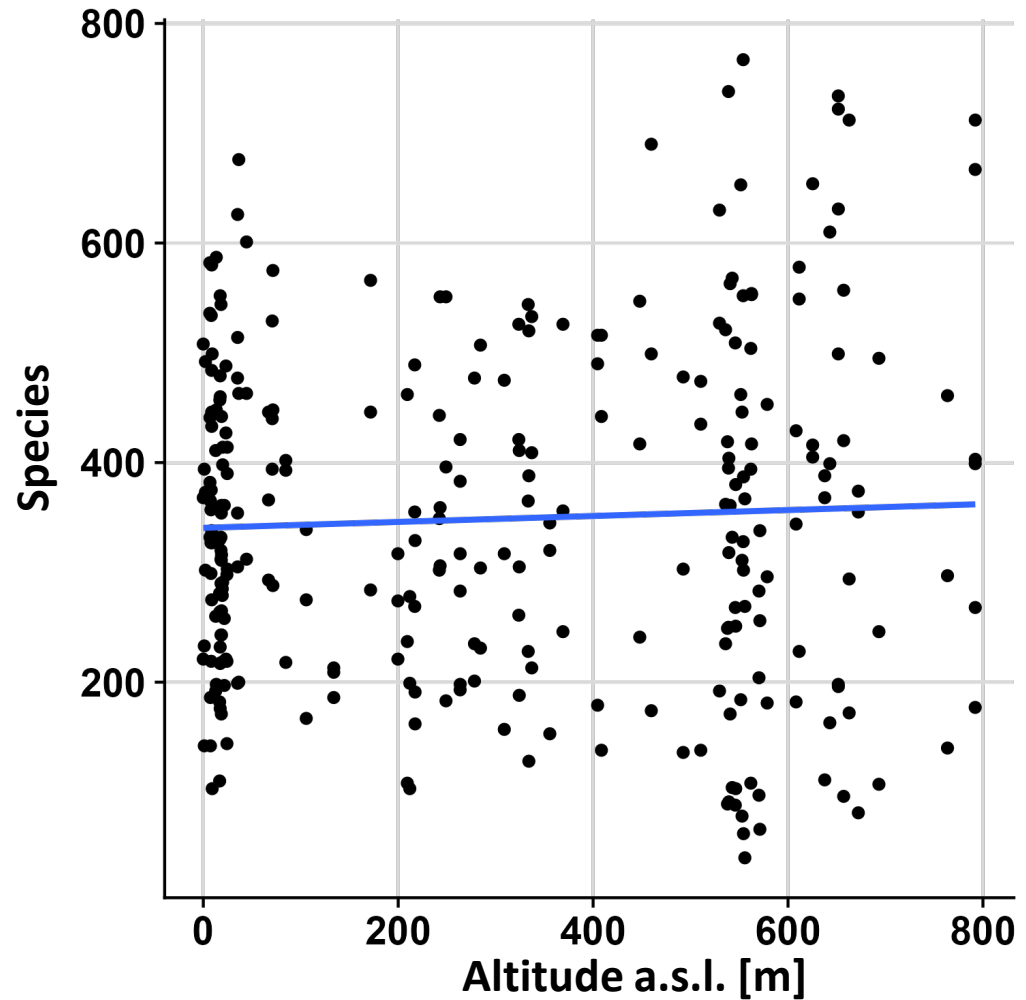
- Sequencing results are verified through taxonomic experts
- Main topics of data analysis:
 - Current species numbers
 - Occurrence of Red List species
- Ecological analysis of the results:
 - Spatial and temporal distribution of diversity
 - Identification of climate change-induced migration of species
 - Influences from environment, protection status, and management practices

- Just some days ago: finally all samples analyzed
 - Long process of data cleaning and analysis is necessary
 - Many partners and experts involved
 - Analysis of ecological data, geographic regions, distance from agricultural land and water, distribution of endangered species in different habitat types

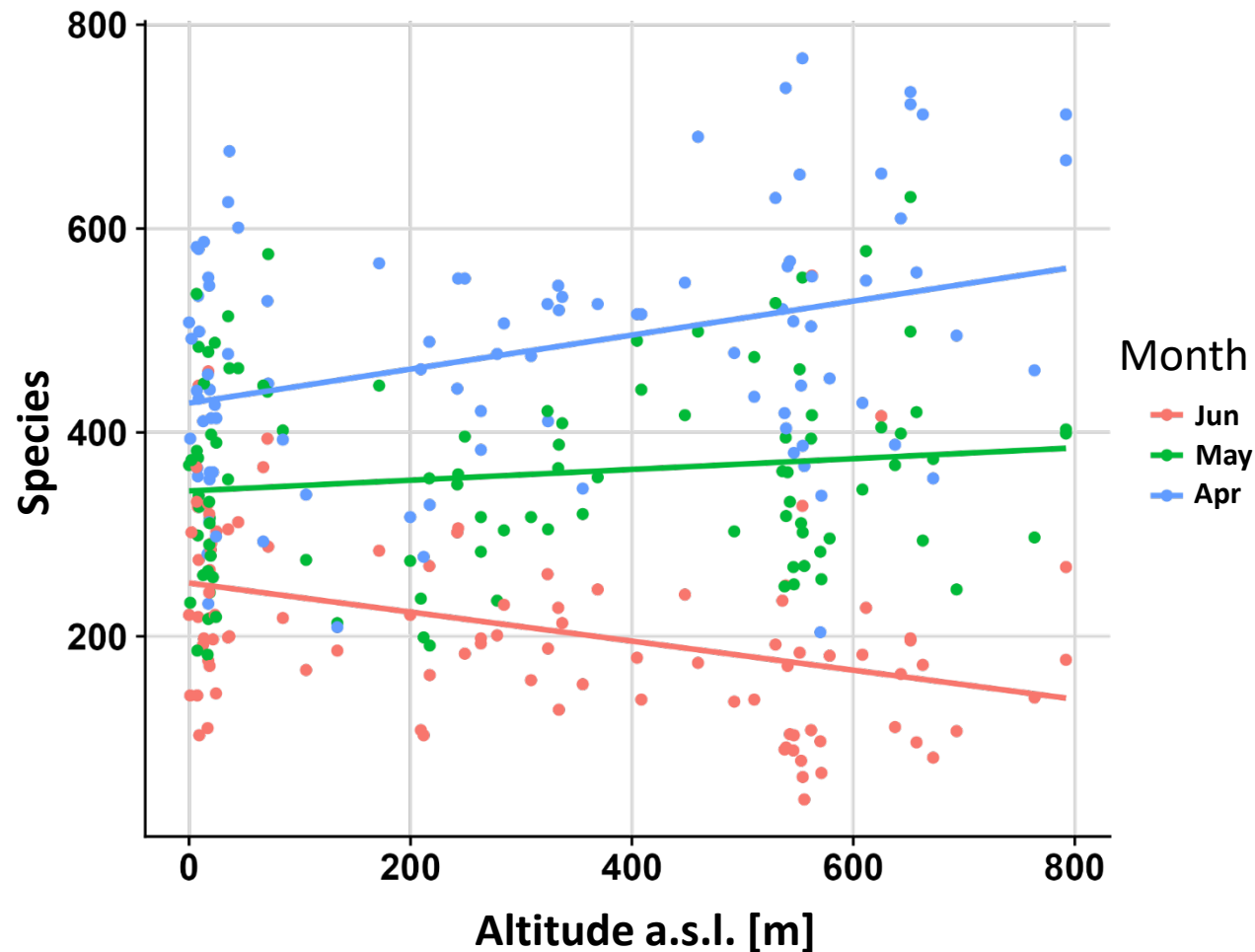
- High variance of species diversity between habitat types
- Mesophilic habitats show highest number in species diversity



- No clear trend of species diversity and altitude a.s.l.

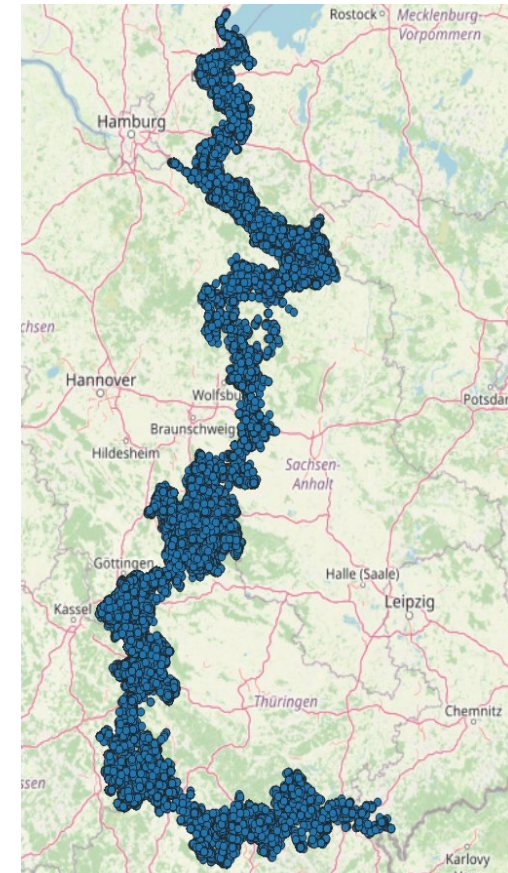


- No clear trend of species diversity and altitude a.s.l.
- Clear trends when separated into months



Complementary data collection:

- Collection of data from previous surveys of biological diversity:
 - Previous surveys of species diversity (all groups)
 - Species monitoring in and outside of protected areas
 - Management plans
 - Scientific publications



Borders separate – Nature unites

Thank you for the attention

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Federal Agency for
Nature Conservation

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