

## Master thesis project in Conservation Biology and Urban Ecology



### Connectivity of urban green infrastructures and **nocturnal insects**

Urban green areas support considerable amounts of biodiversity, enhance ecosystem functions and services, while contributing to human well-being. Most urban green and blue infrastructure (GBIs) is fragmented and isolated, thereby hindering the permeability for biodiversity through densely built urban matrices. The effectiveness of these GBIs to biotic permeability depends on their structural complexity, management regime, and spatial configuration at different spatial scales.

In the framework of the EU-Program BiodivERsA, the project BIOVEINS will investigate the role of urban GBI connectivity and configuration in enhancing taxonomic and functional biodiversity of different taxonomic groups in urban parks within six cities along a S-N and W-E gradient throughout Europe: Lisbon/PL, Paris/F, Zurich/CH, Antwerp/B, Poznan/P and Tartu/EST.

The study led by the Swiss partner (WSL) will sample bees, wasps, nocturnal insects and bats from parks in the aforementioned cities and use composition, configuration and connectivity of GBIs to model species and functional composition of the different taxa. The project is conducted by a PhD and two **Master students** under the supervision of the WSL.

The master candidate will investigate nocturnal insects throughout the summer of 2018 with standardized light traps in 12 parks in each of the aforementioned cities during 4 months of field work. Analyses will consider taxonomic and functional diversity, linked to GBI connectivity and configuration, and will lead to a scientific publication. The student will have to work in tight parallel, coordination and support of a second master student investigating habitat use by bats at the same locations in temporal synchrony. Transport and housing will be compensated for during the spacious field season.

**Links:** [BiodivERsAa project page](#) ; [Bioveins website](#) ; [pdf download](#)

**Prerequisites:** organizing skills; fluent communications in English; driving license and experience; eager to do field work at night; willing to travel; some entomological knowledge or deep interest to learn; experience in GIS-techniques and R are advantageous as they will be needed.

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