

One MSc thesis opportunity

Quantifying ecosystem functions in different habitats using sentinels

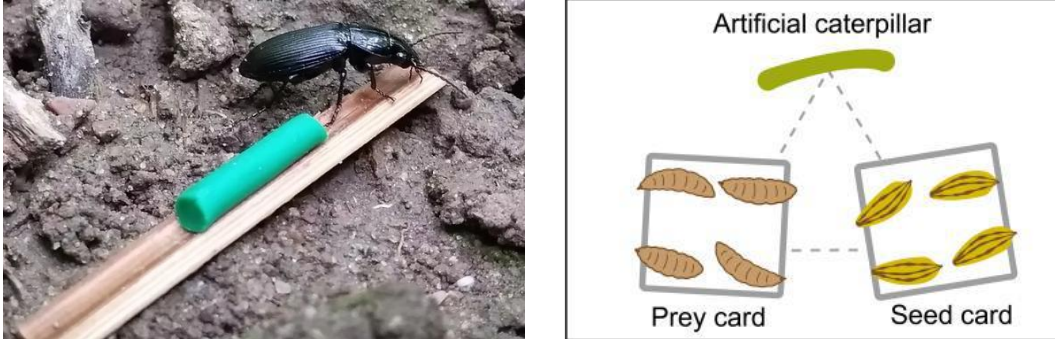


Fig.1 Artificial caterpillar with carabid (left) and sentinels to quantify predation, seed predation and scavenging (right).

Biodiversity, through species interactions, underpins numerous ecosystem functions that can lead to ecosystem services and disservices. Quantifying these functions is crucial for evaluating the effectiveness of conservation and management strategies, as well as the impacts of land use change (Ferrante & Lövei 2025). As part of the HEAVEN project, we aim to investigate the contribution of non-crop habitats to the ecosystem services provided by vertebrates and invertebrates. We are interested in monitoring pest predation, scavenging, and seed predation. However, additional ecosystem functions (e.g., fruit consumption, herbivory, detritivory) can be considered.

We are looking for one MSc student who is interested in conducting his/her thesis on quantification of ecosystem functions.

Tasks: Ecosystem function quantifications and data analyses using R.

Requirements: Interested in fieldwork and learning about quantification of ecosystem functions. Willingness to write your thesis in English. Having a driving license and willingness to drive are requested. Knowledge of R is an asset.

Period: Starting in March/April 2026.

Opportunities: You will gain experience in fieldwork, and scientific analysis, as well as improve your writing skills. You will be part of the HEAVEN project ([Home - Georg-August-Universität Göttingen](#)), which aims at the conservation of biodiversity and ecosystem functions in agricultural landscapes.

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Literature:

[The sentinel approach to quantify ecosystem function intensities - Ferrante - Methods in Ecology and Evolution - Wiley Online Library](#)

[Research trends in ecosystem services provided by insects - ScienceDirect](#)

[Understanding the pathways from biodiversity to agro-ecological outcomes: A new, interactive approach - ScienceDirect](#)

