UNIVERSITY OF HOHENHEIM

Center for Biodiversity and Integrative Taxonomy (KomBioTa)

NATURAL HISTORY MUSEUM STUTTGART

HABITAT ASSESSMENT AND BIODIVERSITY MONITORING AT THE UNIVERSITY OF HOHENHEIM

Background and Objectives

The University of Hohenheim offers a diverse landscape with various habitats. The aim of this project is to systematically map the existing habitats and assess their suitability for the preservation of biodiversity. Based on these findings, a theoretical monitoring concept will be developed to enable long-term and regular biodiversity monitoring.

In addition to analysing local conditions, the project aims to develop standardized methods and approaches for habitat assessment and biodiversity monitoring that are specifically tailored to higher education institutions. This is particularly important as many universities face similar challenges, such as limited resources, varying levels of species expertise, and the need to balance scientific and practical goals. A standardized approach could not only improve the comparability of results between institutions but also serve as a model for other universities to integrate biodiversity conservation into their sustainability strategies.

Possible Research Questions:

- How can a monitoring concept be developed that considers university-specific conditions and is feasible in the long term?
- What approaches are suitable for universities with different levels of species knowledge to assess and evaluate biodiversity?
- What habitats exist on the University of Hohenheim's campus, and how can they be mapped?

Proposed Methodology:

- Development of a biodiversity monitoring approach that can be adapted based on the expertise of staff and students → Literature review and concept development
- Identification and selection of key species or indicator groups (e.g., plants, insects, birds)
- Literature review on the integration of modern technologies such as drones, sensors, or citizen science approaches
- Testing the Concept - Habitat Mapping

Expected Outcomes:

A flexible and practical monitoring concept that can be implemented with both basic and advanced species knowledge. A detailed overview of the habitats on the university campus

Required Skills:

While prior experience with GIS and knowledge in vegetation science and biodiversity mapping (and/or monitoring) would be advantageous, it is not a strict requirement. However, a willingness to independently learn and engage with these topics will be essential

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