

MASTER THESES PROJECTS

Diversity and species composition of xylobiotic beetles sampled by flight interception traps in three large protected areas in Lower Austria

Although beetles represent an ecologically important group of high conservation value, knowledge on species diversity in Austria's large protected areas is still far from being comprehensive. This project will contribute to inventorying the richness of xylobiotic beetles assessed by flight interception traps in three large protected areas in Lower Austria – the Donau-Auen National Park, Thayatal National Park and Biosphärenpark Wienerwald. The collected data will be used to analyze patterns of species composition on different spatial scales. Hence, depending on the research question addressed, the focus of a master's thesis can either be on understanding drivers of spatial heterogeneity of xylobiotic beetle communities at the level of one of the protected areas or on topics requiring a comparison between all three protected areas. On the scale of individual protected areas, effects of spatial heterogeneity in forest stand composition, microclimatic conditions and deadwood volume on species composition will be quantified. Comparisons between the three protected areas will be conducted to quantify their importance for maintaining Coleoptera diversity on a larger spatial scale.

Tasks

- Standardized sampling of macropterous beetles with flight interception traps at sites selected in close collaboration with the authorities of Donau-Auen National Park, Thayatal National Park and/or Biosphärenpark Wienerwald; sampling of beetles will be done with the help of staff from the protected areas
- Identification of samples in collaboration with taxonomists specialized on different Coleoptera groups
- Data analysis

Time schedule

April 2022	Selection of sampling sites and installation of flight interception traps
Mai-August 2022	Exposure of flight interception traps for sampling beetles Assessment of biotic and abiotic habitat variables



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The research project is suitable for Master students in conservation biology, ecology and zoology.

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