



Bicoloured shrew (*Crocodyra leucodon*). © S.v. Merten

Master Environment & Biodiversity Master Thesis

The influence of traffic noise on field activity patterns of small mammals

Supervisor

Sophie von Merten, [University of Salzburg](#)

Most animals depend on sound for survival. They detect prey or predators by means of sound and use vocalisation to communicate with conspecifics. In a world polluted by anthropogenic noise, such sound-based behaviours can be negatively affected. This has mainly been studied in birds, bats, and medium- to large-sized mammals; however, knowledge on small mammals is scarce.

In this study, the following hypothesis will be investigated: **Small mammals (mice and shrews) adjust both their distribution and daily activity patterns in response to traffic noise.** To do so, wild small mammals will be observed along gradients of noise inside their natural habitat using specially adjusted camera trap-systems. Additionally, sound recorder devices will assess local levels of noise. The collected video and audio recordings will be analysed to test the hypothesis.

During this master thesis, you will learn and apply the following methods and techniques:

- Field work to install camera traps and sound-recorders
- Analysis of video recordings to assess small mammal presence and activity
- Analysis of audio recordings to assess traffic noise levels
- Statistical analysis
- Literature research
- Preparation of a scientific text: your thesis

Interested? Don't hesitate to contact me: sophie.vonmerten@plus.ac.at