Understanding patterns and drivers of mammalian home ranges

Level: Bachelor or Master Start: Anytime Project form: Literature view, data collection and analysis Supervision: Marlee Tucker, Maarten Broekman Contact: M.Tucker@science.ru.nl; M.Broekman@science.ru.nl

Home range is the area that animals use to secure resources for reproduction and survival (Burt, 1943) and is a reflection of how animals interact with their environment (Börger et al., 2008) and their energetic constraints (Boratyński, 2020; Enriquez-Urzelai & Boratyński, 2022). Home range is commonly estimated because it provides ecological information on use of space by animals, resource use (Butler et al., 2020; Ofstad et al., 2019), predation (Messinger et al., 2019), the distribution of organisms and populations (Wang & Grimm, 2007) and their social interactions (Olejarz et al., 2022). The information derived from home ranges is also useful for conservation managers, such as for controlling invasive species (Hradsky et al., 2019), identifying areas that are commonly used by multiple species and ensuring that protected areas are large enough to support species (Di Franco et al., 2018). Home range is therefore a valuable and widely used metric of space use by animals.

We are interested in a range of questions related to mammalian home range, spanning from species traits, environmental drivers, human impacts and changes over time. We have complied a large database that could be used to answer a range of different questions. If you are interested in a topic related to this research line, please get in contact!

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