

MSc thesis / Examensarbete

Linking hunters' local knowledge to empirical data from DNA and camera traps

Understanding how animals behave under different environmental conditions is essential for the sustainable management of wildlife populations. Local people and especially hunters have often accumulated a wealth of information about how different species behave and interact in a particular area. Such local knowledge (LK) can augment scientific knowledge (SK) generated from empirical research and benefit wildlife and humans alike when integrated into an adaptive management process. However, studies quantifying local knowledge and relating it directly to empirical observations from field experiments are rare.

This MSc project will focus on:

- 1) Collecting traditional local knowledge about ungulate (moose, red deer, roe deer and fallow deer) diets and movement patterns from hunters on Järnäshalvön (ca. 30km south of Umeå).
- 2) Relating these data to already available datasets of ungulate diets (from a DNA metabarcoding study) and movements (from camera traps and GPS collars).

The project will advance our understanding of overlaps and discrepancies between LK and SK and contribute to improving the monitoring and management of multi-species ungulate systems. The successful candidate will be integrated into a broad network of collaborators, including local stakeholders, the Swedish Hunting Association as well as the research projects Governance, Beyond Moose and Scandcam. We are looking for a motivated student with interest in both social sciences and ecology. Due to the nature of the study, fluency in Swedish is a strong merit. Previous experience with (or willingness to learn) the statistical software R would be advantageous.

Credits: 30

Project start: from August/September 2018

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