



## SEMINAR

# Ecology in the Big Data era: the importance of data and protocol standardisation

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How do we monitor wildlife at large scales? We can observe animals, track their traces, analyse environmental DNA, or, if we stay quiet, listen. Acoustic monitoring has a huge potential to fill gaps in existing monitoring schemes. However, there are still some challenges to solve while scaling up to the continental level.

After a master's degree in sustainable territorial planning, I worked for two years in the field collecting and mapping ecological data, which inspired my focus on improving data workflows. My research at NINA aims to draw from knowledge and lessons learned across data collection approaches (e.g. CamtrapDP) to standardise audio data collection, calibration, and sharing, so that acoustic data can be reliably combined with other monitoring methods.

In this talk, I will explore the practical challenges of large-scale ecological monitoring, protocol differences, device biases, inconsistent metadata, and how standardisation can turn big datasets into robust, comparable ecological information. Data collection standardisation sets the basis for data sharing, AI application and Biodiversity monitoring across methodologies

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